

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 4, 2005, 11:05:21 ; Search time 42 Seconds
(without alignments)
76.426 Million cell updates/sec

Title: US-09-939-780-3
Perfect score: 244
Sequence: 1 GGGGWWGGGSHSQWNKPSKP.....NMKHVAGAAAGAVVGLGGY 43

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/1aa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/1aa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/1aa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/1aa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/1aa/PC7US_COMB.pep:*
6: /cgn2_6/ptodata/1/1aa/backfile01.pep:*

Pred. NO. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Query length	DB ID	Description
1	216	88.5	255	1 US-08-242-188-4	Sequence 4, Appl1
2	216	88.5	255	1 US-08-509-261A-4	Sequence 4, Appl1
3	216	88.5	255	1 US-08-660-626-10	Sequence 10, Appl1
4	216	88.5	255	1 US-08-692-892-4	Sequence 4, Appl1
5	216	88.5	255	2 US-08-713-939A-4	Sequence 4, Appl1
6	216	88.5	255	2 US-08-868-162A-24	Sequence 24, Appl1
7	216	88.5	255	3 US-09-031-168-10	Sequence 10, Appl1
8	216	88.5	255	3 US-09-036-579-4	Sequence 4, Appl1
9	216	88.5	255	3 US-09-550-374-4	Sequence 4, Appl1
10	216	88.5	255	4 US-09-943-906-4	Sequence 4, Appl1
11	216	88.5	255	4 US-09-669-516C-10	Sequence 10, Appl1
12	216	88.5	256	3 US-09-128-450-22	Sequence 22, Appl1
13	216	88.5	256	3 US-09-823-494-22	Sequence 22, Appl1
14	210	86.1	256	4 US-09-431-887-25	Sequence 25, Appl1
15	210	86.1	256	4 US-09-431-887-28	Sequence 28, Appl1
16	209	85.7	219	4 US-09-380-015B-2	Sequence 2, Appl1
17	209	85.7	263	1 US-08-242-188-3	Sequence 3, Appl1
18	209	85.7	263	1 US-08-509-261A-3	Sequence 3, Appl1
19	209	85.7	263	1 US-08-660-626-9	Sequence 9, Appl1
20	209	85.7	263	1 US-08-692-892-3	Sequence 3, Appl1
21	209	85.7	263	2 US-08-713-939A-3	Sequence 3, Appl1
22	209	85.7	263	2 US-08-868-162A-23	Sequence 23, Appl1
23	209	85.7	263	3 US-09-031-168-9	Sequence 9, Appl1
24	209	85.7	263	3 US-09-036-579-3	Sequence 3, Appl1
25	209	85.7	263	3 US-09-550-374-3	Sequence 3, Appl1
26	209	85.7	263	4 US-09-943-906-3	Sequence 3, Appl1
27	209	85.7	263	4 US-09-669-516C-9	Sequence 9, Appl1

28	209	85.7	264	3 US-09-128-450-21	Sequence 21, Appl1
29	209	85.7	264	3 US-09-823-494-21	Sequence 21, Appl1
30	209	85.7	264	4 US-09-627-218B-11	Sequence 11, Appl1
31	207	84.8	256	4 US-09-431-887-26	Sequence 26, Appl1
32	203	83.2	264	4 US-09-431-887-27	Sequence 27, Appl1
33	196.5	80.5	252	4 US-09-431-887-13	Sequence 13, Appl1
34	195.5	80.1	257	4 US-09-431-887-29	Sequence 29, Appl1
35	194	79.5	264	4 US-09-431-887-24	Sequence 24, Appl1
36	193.5	79.3	253	1 US-08-242-188-2	Sequence 2, Appl1
37	193.5	79.3	253	1 US-08-509-261A-2	Sequence 2, Appl1
38	193.5	79.3	253	1 US-08-660-626-8	Sequence 8, Appl1
39	193.5	79.3	253	1 US-08-692-892-2	Sequence 2, Appl1
40	193.5	79.3	253	2 US-08-713-939A-2	Sequence 2, Appl1
41	193.5	79.3	253	2 US-08-868-162A-22	Sequence 22, Appl1
42	193.5	79.3	253	3 US-09-031-168-8	Sequence 8, Appl1
43	193.5	79.3	253	3 US-09-128-450-20	Sequence 20, Appl1
44	193.5	79.3	253	3 US-09-036-579-2	Sequence 2, Appl1
45	193.5	79.3	253	3 US-09-823-494-20	Sequence 20, Appl1

ALIGNMENTS

RESULT 1
US-08-242-188-4
; Sequence 4, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Karl Boscevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188
; FILING DATE: 13-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Boscevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/014001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 854-5277
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 255 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULAR TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: SHEEP PRION PROTEIN, ShPrp
; US-08-242-188-4

Query Match 88.5%; Score 216; DB 1; length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPTNMKHVAG-AAAGAVVGLGGY 43

Db 88 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGGGLGY 130

RESULT 2

US-08-509-261A-4
Sequence 4, Application US/08509261A
Patent No. 5763244

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: in a Sample and Transgenic Animal used fore
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:

ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 6510-030001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650-327-3400

TELEFAX: 650 327-3231

TELEX:

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 255 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

US-08-509-261A-4

Query Match 88.5%; Score 216; DB 1; Length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGGGLGY 43
Db 88 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGGGLGY 130

RESULT 3

US-08-660-626-10

Sequence 10, Application US/08660626
Patent No. 5789655

GENERAL INFORMATION:

APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling

APPLICANT: Fred E. Cohen

APPLICANT: Michael R. Scott

TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING

TITLE OF INVENTION: EPILOPE-TAGGED PROTEINS

NUMBER OF SEQUENCES: 13

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asclit

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/660,626

FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Valeta Gregg

REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070

TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:

LENGTH: 255 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

ORGANISM: SHEEP PRION PROTEIN, SHPrP

US-08-660-626-10

Query Match 88.5%; Score 216; DB 1; Length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGGGLGY 43
Db 88 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGGGLGY 130

RESULT 4

US-08-692-892-4

Sequence 4, Application US/08692892
Patent No. 5792901

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn

TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND

TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME

NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:

ADDRESSEE: Karl Bozicevic

STREET: 2200 Sand Hill Road

CITY: Menlo Park

STATE: CA

COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/692,892

FILING DATE: 30-JULY-1996

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 06510/056001

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 255 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: SHEEP PRION PROTEIN, ShpPr
US-08-692-892-4

Query Match 88.5%; Score 216; DB 1; Length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

Oy 1 GGGGCGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGY 43
|||||
Db 8 GGGGCGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGY 130

RESULT 5
US-08-713-939A-4
Sequence 4, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 255 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-4

Query Match 88.5%; Score 216; DB 2; Length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

Oy 1 GGGGCGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGY 43

Db 88 GGGGCGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGY 130
|||||

RESULT 6
US-08-868-162A-24
Sequence 24, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 255 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: SHEEP PRION PROTEIN, ShpPr
US-08-868-162A-24

Query Match 88.5%; Score 216; DB 2; Length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

Oy 1 GGGGCGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGY 43
|||||
Db 8 GGGGCGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGY 130

RESULT 7
US-09-031-168-10
Sequence 10, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING

;; TITLE OF INVENTION: EPTOPE-TAGGED PROTEINS
;; NUMBER OF SEQUENCES: 13
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Fish & Richardson
;; STREET: 2200 Sand Hill Road, Suite 100
;; CITY: Menlo Park
;; STATE: California
;; COUNTRY: USA
;; ZIP: 94025
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: ASCII
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/031,168
;; FILING DATE:
;; CLASSIFICATION:
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/660,626
;; FILING DATE:
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Valeta Gregg
;; REGISTRATION NUMBER: 35,127
;; REFERENCE/DOCKET NUMBER: 07532/003001
;; TELEPHONE: (415) 322-5070
;; TELEFAX: (415) 854-0875
;; INFORMATION FOR SEQ ID NO: 10:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 255 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
;; ORIGINAL SOURCE:
;; ORGANISM: SHEEP PRION PROTEIN, ShPrP
;; US-09-031-168-10

Query Match 88.5%; Score 216; DB 3; Length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
Db 88 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 130

RESULT 8
US-09-036-579-4
; Sequence 4, Application US/09036579
; Patent No. 6290954
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; APPLICANT: Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/036,579
; FILING DATE:

;; CLASSIFICATION:
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/713,939
;; FILING DATE: 13-SEP-1996
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Bozicevic, Karl
;; REGISTRATION NUMBER: 28,807
;; REFERENCE/DOCKET NUMBER: 06510/059001
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 415-854-5277
;; TELEFAX: 415-854-0875
;; TELEX:
;; INFORMATION FOR SEQ ID NO: 4:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 255 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
;; US-09-036-579-4

Query Match 88.5%; Score 216; DB 3; Length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
Db 88 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 130

RESULT 9
US-09-550-374-4
; Sequence 4, Application US/09550374
; Patent No. 6372214
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; APPLICANT: Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/550,374
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/036,579
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/059001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-854-5277
; TELEFAX: 415-854-0875
; TELEX:
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 255 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear

; MOLECULE TYPE: peptide
US-09-550-374-4

Query Match 88.5%; Score 216; DB 3; Length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWSGGSGSHSQWNKPSKPKTKNMKVAG-AAAGAVVGGLGGY 43
DB 88 GGGGWSGGSGSHSQWNKPSK-PKTKNMKVAGAAAGAVVGGLGGY 130

RESULT 10

US-09-943-906-4
; Sequence 4, Application US/09943906
; Patent No. 6562341

; GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony
Burton, Dennis R.

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86

CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.

STREET: 2200 Sand Hill Road
CITY: Menlo Park

STATE: CA
COUNTRY: U.S.A.

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FastSeq Version 2.0

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906

FILING DATE: 30-Aug-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 255 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 4:

US-09-943-906-4

Query Match 88.5%; Score 216; DB 4; Length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWSGGSGSHSQWNKPSKPKTKNMKVAG-AAAGAVVGGLGGY 43
DB 88 GGGGWSGGSGSHSQWNKPSK-PKTKNMKVAGAAAGAVVGGLGGY 130

RESULT 11

US-09-669-516C-10

; Sequence 10, Application US/09669516C

; Patent No. 6602672

; GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
Telling, Glenn C.

APPLICANT: Cohen, Fred E.

APPLICANT: Scott, Michael R.

TITLE OF INVENTION: RECOMBINANT CONSTRUCT ENCODING EPIOTOPE

TITLE OF INVENTION: TAGGED PrP PROTEIN

FILE REFERENCE: UCAL-045CON

CURRENT APPLICATION NUMBER: US/09/669,516C

CURRENT FILING DATE: 2000-09-25

PRIOR APPLICATION NUMBER: 09/031,168

PRIOR FILING DATE: 1998-02-26

PRIOR APPLICATION NUMBER: 08/660,626

PRIOR FILING DATE: 1996-06-06

PRIOR APPLICATION NUMBER: 08/521,992

PRIOR FILING DATE: 1995-08-31

PRIOR APPLICATION NUMBER: 08/509,261

PRIOR FILING DATE: 1995-07-31

PRIOR APPLICATION NUMBER: 08/242,188

PRIOR FILING DATE: 1994-05-13

NUMBER OF SEQ ID NOS: 15

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 10

LENGTH: 255

TYPE: PrP

ORGANISM: bovine sp.

US-09-669-516C-10

Query Match 88.5%; Score 216; DB 4; Length 255;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWSGGSGSHSQWNKPSKPKTKNMKVAG-AAAGAVVGGLGGY 43
DB 88 GGGGWSGGSGSHSQWNKPSK-PKTKNMKVAGAAAGAVVGGLGGY 130

RESULT 12

US-09-128-450-22

; Sequence 22, Application US/09128450

; Patent No. 6211149

; GENERAL INFORMATION:

APPLICANT: Chesebro, Bruce W

APPLICANT: Caughey, Byron W

APPLICANT: Chabry, Joelle

APPLICANT: Priola, Susette

TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion

TITLE OF INVENTION: Protein

FILE REFERENCE: 50121

CURRENT APPLICATION NUMBER: US/09/128,450

CURRENT FILING DATE: 1998-08-03

NUMBER OF SEQ ID NOS: 29

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 22

LENGTH: 256

TYPE: PrP

ORGANISM: Ovis aries

US-09-128-450-22

Query Match 88.5%; Score 216; DB 3; Length 256;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWSGGSGSHSQWNKPSKPKTKNMKVAG-AAAGAVVGGLGGY 43
DB 89 GGGGWSGGSGSHSQWNKPSK-PKTKNMKVAGAAAGAVVGGLGGY 131

RESULT 13

US-09-823-494-22

; Sequence 22, Application US/09823494

; Patent No. 6355610

; GENERAL INFORMATION:

APPLICANT: Chesebro, Bruce W

```
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; TITLE OF INVENTION: Protein
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 22
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Ovis aries
US-09-823-494-22
```

```
Query Match      88.5%; Score 216; DB 3; Length 256;
Best Local Similarity 95.5%; Pred. No. 3.9e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
```

```
QY      1 GGGWGQGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGKY 43
      |||||||||||||||||||||||||||||||||||||||
Db      89 GGGWGQGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGKY 131
```

```
RESULT 14
US-09-431-887-25
; Sequence 25, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 25
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Ovis sp.
US-09-431-887-25
```

```
Query Match      86.1%; Score 210; DB 4; Length 256;
Best Local Similarity 95.3%; Pred. No. 1.9e-16;
Matches 41; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
```

```
QY      2 GGGWGQGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGKY 43
      |||||||||||||||||||||||||||||||||||||||
Db      90 GGGWGQGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGKY 131
```

```
RESULT 15
US-09-431-887-28
; Sequence 28, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 28
```

```
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Capra hircus
US-09-431-887-28
```

```
Query Match      86.1%; Score 210; DB 4; Length 256;
Best Local Similarity 95.3%; Pred. No. 1.9e-16;
Matches 41; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
```

```
QY      2 GGGWGQGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGKY 43
      |||||||||||||||||||||||||||||||||||||||
Db      90 GGGWGQGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGKY 131
```

```
Search completed: March 4, 2005, 11:11:09
Job time : 43 secs
```

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using SW model

Run on: March 4, 2005, 11:05:20 ; Search time 70 Seconds
(without alignments)
237.581 Million cell updates/sec

Title: US-09-939-780-3
Perfect score: 244
Sequence: 1 GGGGCGGCGSHSQWNKPSKP.....NMKHVGAAGAVVGGLGY 43

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_16Dec04:*

1: Geneseqp1980s:*

2: Geneseqp1990s:*

3: Geneseqp2000s:*

4: Geneseqp2001s:*

5: Geneseqp2002s:*

6: Geneseqp2003as:*

7: Geneseqp2003bs:*

8: Geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	244	100.0	178	2	AAW70280 Peptide s
2	233.5	95.7	178	5	ABG31260 N termina
3	216	88.5	255	2	AAR86717 Sheep pri
4	216	88.5	255	2	AAW69662 Sheep pri
5	216	88.5	255	2	AAW85903 Sheep pri
6	216	88.5	255	4	AAW65855 Sheep pri
7	216	88.5	255	5	ABP51789 Sheep pri
8	216	88.5	255	6	ABU58870 Sheep pri
9	216	88.5	255	6	AAE33229 Sheep pri
10	216	88.5	255	8	ADK15536 Sheep pri
11	216	88.5	255	8	ADJ10165 Sheep cel
12	216	88.5	256	1	AAW93674 Sheep prp
13	216	88.5	256	4	AAW72362 Sheep pri
14	216	88.5	256	4	AAW72365 Goat prio
15	216	88.5	256	4	AAE08571 Sheep pri
16	216	88.5	256	4	AAW61771 Sheep pri
17	216	88.5	256	4	AAW82114 Sheep prp
18	216	88.5	256	5	AAE15605 Sheep pri
19	216	88.5	256	5	AAE29225 Sheep pri
20	216	88.5	256	6	ABU07875 Sheep pri
21	216	88.5	256	6	ABP57901 Sheep BSE
22	216	88.5	256	6	ABR42796 Sheep pri
23	216	88.5	256	7	ADD24195 Goat prio
24	216	88.5	256	7	ADD24188 Sheep pri
25	216	88.5	256	7	ADE06741 Sheep pri

26	216	88.5	256	7	ADE06742 Sheep pri
27	216	88.5	256	8	ADH44554 Ovine pri
28	216	88.5	256	8	ADH44564 Feline pr
29	216	88.5	256	8	ADK15537 Ovine prp
30	213	87.3	211	8	ADH44566 Prion pro
31	213	87.3	256	4	AAW72363 Antelope
32	213	87.3	256	4	AAW08572 Oryx demm
33	213	87.3	256	6	ABP57902 White tai
34	213	87.3	256	6	ABP57903 Mule deer
35	213	87.3	256	6	ABP57904 Elk BSE-r
36	213	87.3	256	7	ADD24189 Elk prion
37	213	87.3	256	7	ADD24190 Mule deer
38	213	87.3	256	8	ADH44565 Red deer
39	211	86.5	256	5	ABB04423 Goat prio
40	211	86.5	256	5	ABB04422 Sheep pri
41	211	86.5	256	6	ABR42797 Goat prio
42	209	85.7	56	8	ADL15231 Bovine pr
43	209	85.7	217	3	AAW07317 Cattle pr
44	209	85.7	217	3	AAW07328 Cattle pr
45	209	85.7	219	2	AAW70261 Bovine pr

ALIGNMENTS

RESULT 1		AAW70280	
ID	AAW70280	standard; peptide; 178 AA.	
AC	AAW70280;		
DT	06-NOV-1998	(first entry)	
DE	Peptide sequences used to raise antibodies against prion protein.		
KW	Spinal cord; cattle; sheep; pig; bovine spongiform encephalopathy; BSE;		
KW	scrapie; transmissible spongiform encephalopathy; TSE;		
KW	immunological assay; scrapie prion protein; prpsc.		
OS	Synthetic.		
FX			
FT	Key	Location/Qualifiers	
FT	Region	28..61	
FT		/note="Synthetic sequence used to raise antibody against prpsc"	
FT	Region	90..128	
FT		/note="Synthetic sequence used to raise antibody against prpsc"	
XX	PN	W09835236-A2.	
XX	PD	13-AUG-1998.	
XX	PF	06-FEB-1998; 98WO-IB000007.	
XX	PR	06-FEB-1997; 97IE-00000081.	
XX	PR	24-MAR-1997; 97IE-00000228.	
XX	PR	01-MAY-1997; 97IE-00000325.	
XX	PA	(ENFE-) ENFER TECHNOLOGY LTD.	
XX	PI	O'Connor M;	
XX	DR	WPI; 1998-447377/38.	
XX	PT	Detecting pathogenic prion(s) in animal carcasses - by reaction with specific labelled antibody, used to detect those carrying agents for bovine spongiform encephalopathy and scrapie.	
XX	PS	Claim 3; Page 23; 25pp; English.	
XX	CC	The invention claims to provide a method for detecting transmissible spongiform encephalopathies (TSE) in animals and in animal carcasses. The	
CC	CC		

CC method comprises of an immunological assay whereby the animal test sample
CC is reacted with a labelled antibody against scrapie prion protein (prpSc)
CC and the amount of bound labelled antibody is then detected. The anti-
CC prpSc antibodies used in the assay are raised against fragments of the
CC present synthetic peptide shown. The peptide fragments preferred by the
CC inventors are shown in the features table. The method is claimed to be
CC useful when applied to samples, particularly a cross-section of the
CC spinal cord, from cattle, sheep and pig carcasses for detection of bovine
CC spongiform encephalopathy (BSE) or scrapie
XX
SQ Sequence 178 AA;

Query Match 100.0%; Score 244; DB 2; Length 178;
Best Local Similarity 100.0%; Pred. No. 3.3e-19;
Matches 43; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 GGGGWWGGGSHSQWNKPSKPKPTNMKGVAG-AAAGAVVGGLGGY 43
|||||
DB 90 GGGGWWGGGSHSQWNKPSKPKPTNMKGVAGAAAGAVVGGLGGY 132

RESULT 2
ABG31260
ID ABG31260 standard; protein; 178 AA.

XX AC ABG31260;

XX DT 21-OCT-2002 (first entry)

XX DE N terminal prion protein (Prp) sequence.

XX KM Prion; Prp; Transmissible Spongiform Encephalopathy; TSE;

XX KW Bovine Spongiform Encephalopathy; Scrapie; Creutzfeldt-Jacob Disease;

XX KM Kuru; antigen.

XX OS Unidentified.

FH Key Location/Qualifiers
FT Region 88..116
FT /note= "Antigenic epitope"

XX PN WO200257789-A2.

XX PD 25-JUL-2002.

XX PF 18-JAN-2002; 2002WO-IE000006.

XX PR 19-JAN-2001; 2001IE-00000042.

XX PA (ENFB-) ENFER TECHNOLOGY LTD.

XX PI O'connor M;

XX DR WPI; 2002-599727/64.

XX
PT Detecting Transmissible Spongiform Encephalopathies, e.g. Creutzfeldt-
PT Jacob Disease or Kuru, in humans and animals comprises the addition of a
PT prion-specific antibody and an agent that degrades normal or abnormal
PT prion proteins.

XX PS Example; Page 15; 28pp; English.

XX This invention relates to a novel method for detecting Transmissible
CC Spongiform Encephalopathies (TSE) comprising fixing tissue, blood or
CC blood derivative sample, adding a prion-specific antibody and an agent
CC that degrades normal or abnormal prion proteins, and detecting the
CC binding of the antibody to the sample. The method of the invention is
CC useful in detecting Transmissible Spongiform Encephalopathies, e.g.
CC Bovine Spongiform Encephalopathy, Scrapie, Creutzfeldt-Jacob Disease, or
CC Kuru, in humans or animals. This method can also be useful in testing
CC animals, pharmaceuticals and humans for the infective agent responsible
CC for TSE. The method provides a multi-tissue test system which can be used
on both blood or blood-derived products and solid tissues from living

CC animals or human beings, as compared to previous methods of detecting TSE
CC that are carried out only in post-mortem examinations. This allows
CC infected animals to be removed from the population to prevent the spread
CC of the infection, and also allows infected humans to be identified, with
CC the possibility that medical treatment could be administered and a
CC possible cure could be found for the disease. This method is rapid, with
CC the result being available in a matter of hours, cheap, reliable, and
CC user-friendly. The present sequence represents the N terminal sequence of
CC the prion protein (Prp) used to generate the anti-Prp antibody used in
CC the method of the invention
XX
SQ Sequence 178 AA;

Query Match 95.7%; Score 233.5; DB 5; Length 178;
Best Local Similarity 97.7%; Pred. No. 4.8e-18;
Matches 43; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 GGGGWWGGGSHSQWNKPSKPKPTNMKGVAG-AAAGAVVGGLGGY 43
|||||
DB 89 GGGGWWGGGSHSQWNKPSKPKPTNMKGVAGAAAGAVVGGLGGY 132

RESULT 3
AAR86717
ID AAR86717 standard; protein; 255 AA.

XX AC AAR86717;

XX DT 15-OCT-1996 (first entry)

XX DE Sheep prion protein, HuPrp.

XX KM Chimeric gene; chimeric prion; transgenic animal; diagnosis;

XX KW spongiform encephalopathy; Prp; central nervous system; CNS;

XX KM Creutzfeld-Jakob disease; CJD; BSE.

XX OS Ovis aries.

XX PN WO9531466-A1.

XX PD 23-NOV-1995.

XX PF 10-APR-1995; 95WO-US004426.

XX PR 13-MAY-1994; 94US-00242188.

XX PA (REGC) UNIV CALIFORNIA.

XX PI Prusiner SB, Scott MR, Telling G;

XX DR WPI; 1996-010868/01.

XX
PT Chimeric prion protein gene - for formation of a transgenic animal
PT susceptible to prion infection by prion(s) normally specific for a
PT different species.

XX PS Disclosure; Page 43-44; 65pp; English.

XX This invention relates to a novel method for detecting the sample to
CC be tested into a transgenic mouse. The mouse genome includes a chimeric
CC prp gene in which the gene includes a portion of a gene of the animal
CC (e.g. sheep) in danger of infection from prions in the sample. Preferred
CC transgenic mice express a chimeric prion protein (Prp) in which a segment
CC of the mouse Prp, MoPrp, is replaced with the corresponding sheep Prp
CC sequence

XX SQ Sequence 255 AA;

Query Match 88.5%; Score 216; DB 2; Length 255;
Best Local Similarity 95.5%; Pred. No. 6.1e-16;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWWGGGSHSQWNKPSKPKPTNMKGVAG-AAAGAVVGGLGGY 43

```

      DB      88 GGGGWMGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 130
      |||||||
RESULT 4
AAW69662
ID   AAW69662 standard; protein; 255 AA.
XX
XX   AAW69662;
AC
XX   25-MAR-2003 (revised)
DT   19-OCT-1998 (first entry)
XX
XX   Sheep prion protein BOPRP.
DE
XX
XX   Sheep; prion protein; PrP; transgenic animal; artificial gene;
KM   Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.
XX
XX   Ovis sp.
OS
XX   US5792901-A.
PN
XX   11-AUG-1998.
PD
XX   30-JUL-1996; 96US-00692892.
PF
XX   13-MAY-1994; 94US-00242188.
PR   31-JUL-1995; 95US-00509261.
PR   31-AUG-1995; 95US-00521992.
XX
XX   (REGC ) UNIV CALIFORNIA.
PA
XX
XX   Scott MR, Telling GC, Prusiner SB;
PI
XX
XX   WPI; 1998-456207/39.
DR
XX
XX   Transgenic mouse with altered PrP gene - for detecting disease-causing
PT   prions.
PT
XX
XX   Example 8; Fig 5; 37pp; English.
PS
XX
XX   A transgenic mouse has been developed which comprises a genome in which
CC   both alleles of an endogenous PrP (prion protein) gene of the mouse are
CC   ablated, the genome containing operatively inserted all exogenous non-
CC   mouse PrP gene. The mouse is susceptible to infection with prions which
CC   generally only infect a genetically diverse mammal due to the presence of
CC   the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
CC   symptoms of prion disease within 200 days or less after inoculation with
CC   prions which generally only infect a genetically diverse mammal. Also
CC   described in the present invention are: (A) a method of producing the
CC   transgenic mouse; and (B) determining the presence of infectious prions
CC   in a sample obtained from a bovine. The transgenic mouse is used to
CC   detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
CC   disease of humans caused by prions. The present sequence represents sheep
CC   prion protein (ShPrP), from the present invention. (Updated on 25-MAR-
CC   2003 to correct PF field.)
XX
XX
SQ   Sequence 255 AA;
      Query Match      88.5%; Score 216; DB 2; Length 255;
      Best Local Similarity 95.5%; Pred. No. 6.1e-16;
      Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
QY   1 GGGGWMGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
      |||||||
DB   88 GGGGWMGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 130
      |||||||
RESULT 5
AAW85903
ID   AAW85903 standard; peptide; 255 AA.
XX
XX   AAW85903;
AC
```

```

      XX
      DT   12-FEB-1999 (first entry)
      XX
      XX   Sheep prion protein (PrP) sequence.
      DE
      XX
      XX   PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
      KM   Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
      KM   cosmetic; therapeutic; sheep.
      XX
      XX   Ovis sp.
      OS
      XX
      XX   US5846533-A.
      PN
      XX   08-DEC-1998.
      PD
      XX
      XX   13-SEP-1996; 96US-00713939.
      PF
      XX
      XX   14-SEP-1995; 95US-00528104.
      PR
      XX
      XX   (REGC ) UNIV CALIFORNIA.
      PA   (SCRI ) SCRIPPS RES INST.
      XX
      XX   Prusiner SB, Williamson RA, Burton DR;
      PI
      XX
      XX   WPI; 1999-058996/05.
      DR
      XX
      XX   Antibody specific for scrapie isoform of prion protein - useful for
      PT   diagnosis and therapy.
      PT
      XX
      XX   Disclosure; Col 43-46; 58pp; English.
      PS
      XX
      XX   This represents a sheep prion protein (PrP) sequence. The invention
      CC   relates to an antibody that is capable of binding to native PrP(Sc), the
      CC   scrapie isoform of PrP. The antibody is produced by a method that
      CC   comprises synthesizing a library of antibodies on phages, contacting the
      CC   phages with a composition containing PrP proteins, isolating phages that
      CC   bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
      CC   and optionally analysing the phages to determine a nucleic acid sequence
      CC   encoding an amino acid sequence to which the native PrP(Sc) binds. The
      CC   antibody is used to detect disease-associated PrP, especially in
      CC   Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
      CC   can also be used to neutralise the infectivity of PrP(Sc). Assays using
      CC   the antibodies can be used to screen for disease-associated PrP in
      CC   pharmaceutical products, foods and cosmetics or for therapeutic purposes
      XX
      XX
SQ   Sequence 255 AA;
      Query Match      88.5%; Score 216; DB 2; Length 255;
      Best Local Similarity 95.5%; Pred. No. 6.1e-16;
      Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
QY   1 GGGGWMGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
      |||||||
DB   88 GGGGWMGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 130
      |||||||
RESULT 6
AAG65855
ID   AAG65855 standard; protein; 255 AA.
XX
XX   AAG65855;
AC
XX
XX   11-FEB-2002 (first entry)
DT
XX
XX   Ovine prion protein (PrP) sequence.
DE
XX
XX   PrP; prion protein; Creutzfeldt-Jakob disease; familial insomnia; PrP-Sc;
KM   scrapie; Gerstmann-Strausler-Scheinker disease.
XX
XX   Ovis sp.
OS
XX
XX   US6290954-B1.
PN
XX
```

PD 18-SEP-2001.
XX
PF 06-MAR-1998; 98US-00036579.
XX
PR 14-SEP-1995; 95US-00528104.
PR 13-SEP-1996; 96US-00713939.
XX
PA (SCRI) SCRIPPS RES INST.
XX
PI Prusiner SB, Williamson RA, Burton DR;
XX
DR WPI; 2001-637939/73.
XX
PT Detecting a scrapie isoform of the prion protein (PrP-Sc) in a source,
PT particularly useful for detecting e.g. Creutzfeldt-Jakob disease or
PT Gerstmann-Strassler-Scheinker disease, by contacting the source with PrP-
PT Sc antibodies.
XX
PS Disclosure; Fig 4; 58pp; English.
XX
XX The invention provides a method for detecting a scrapie isoform of the
CC prion protein (PrP-Sc) in a source. The method involves contacting the
CC source suspected of containing native PrP-Sc with a diagnostic amount of
CC an antibody characterized by its ability to bind to native PrP-Sc in
CC situ. The method is useful for detecting PrP-Sc in a source, which is
CC particularly useful for detecting Creutzfeldt-Jakob disease, fatal
CC familial insomnia or Gerstmann-Strassler-Scheinker disease. The present
CC sequence represents the ovine PrP sequence
XX
SQ Sequence 255 AA;

	Query Match	88.5%;	Score 216;	DB 4;	length 255;
	Best Local Similarity	95.5%;	Pred. No.	6.1e-16;	
Matches	42; Conservative	0;	Mismatches	0;	Indels 2; Gaps 2;
OY	1 GGGGWWQQSGSHSQWNKPKSKPPKTNNKHVAG-AAAGA VVGIGGY	43			
Dd	88 GCGGWQGGSGHSQWNPSPK-PKTNNKHVAGAAAGA VVGELGGY	130			

```

RESULT 7
ABP51789
ID   ABP51789 standard; protein; 255 AA.
XX
XX   ABP51789;
AC
XX   03-OCT-2002 (first entry)
DT
XX
XX   Ovine prion protein (PrP) SEQ ID NO:4.
DE
XX   Prion protein; PrP; scrapie; PrPSc; prion disease; immunoassay;
KW   detection.
XX
XX   Ovis sp.
OS
XX   US6372214-B1.
PN
XX   16-APR-2002.
PD
XX   13-APR-2000; 2000US-00550374.
PF
XX   14-SEP-1995; 95US-00528104.
PR   13-SEP-1996; 96US-00713939.
PR   06-MAR-1998; 98US-00036579.
XX
XX   (REGC ) UNIV CALIFORNIA.
PA   (SCRI ) SCRIPPS RES INST.
XX
XX   Prusiner SB, Williamson RA, Burton DR;
PI
XX   WPI; 2002-433675/46.
DR
XX
XX   Immunoassays for detecting scrapie isoforms of prion protein (PrPSc) and
PT

```

for purifying PrPsc from samples, useful e.g. in diagnosing PrPsc disease and testing pharmaceuticals for contamination.

Disclosure; Fig 4; 58pp; English.

The present invention describes methods for detecting scrapie isoforms of prion protein (PrPsc) infection in dead animals, purifying materials suspected of containing PrPsc proteins and treating materials, using antibodies specific for PrPsc. Also described: (1) method of determining PrPsc infection in a dead animal, comprising: (a) extracting tissue from an animal that has died; (b) contacting the tissue with an antibody characterised by its ability to bind to native PrPsc in situ (the antibody binds to a form of PrPsc specific to the animal that has died); and (c) determining if the antibody has bound to PrPsc (the presence of PrPsc in the tissue is indicative of PrPsc infection); (2) a method of purifying a material suspected of containing a PrPsc protein, comprising: (a) contacting the material with an antibody (characterized by its ability to bind native PrPsc in situ) which is bound to a support surface; and (b) removing material not bound to the antibody; (3) a method of treating a material, comprising applying (to the material) an antibody that binds native PrPsc in situ. The methods are used for diagnosing and detecting prion disease (scrapie) in dead animal tissue (i.e. immunassays), for separating PrPsc proteins from biological samples (i.e. immunopurification) and for treating materials. The present sequence represents the ovine prion protein (PrP) which is given in the exemplification of the present invention

	Query Match	88.5%;	Score 216;	DB 5;	Length 255;
	Best Local Similarity	95.5%;	Pred. No.	6.1e-16;	
	Matches	42; Conservative	0; Mismatches	0; Indels	2; Gaps
OY	1	GGGGMQGGSHSQWNKPSKPPTNMKVAG-AAAGAVGLIGGY			43
Dd	88	GCGGMQGGSHTSNPKSK-PKTNMQHVAAGAAAAGVGVGLIGGY			130

Accession	Species	Strain	Source	Product	Accession	Species	Strain	Source	Product
ABU58870	standard	protein	255 AA.		ABU58870	standard	protein	255 AA.	
ABU58870					ABU58870				
15-APR-2003	(first entry)				15-APR-2003	(first entry)			
Sheep prion protein (PrP).					Sheep prion protein (PrP).				
Prion protein; native prion protein; PrP ^{Sc} ; phage display library; pharmaceutical; food; cosmetic; prion neutralisation; anti-PrP-antibody; scrapie; bovine spongiform encephalopathy; BSE; mad cow disease; feline spongiform encephalopathy.					Prion protein; native prion protein; PrP ^{Sc} ; phage display library; pharmaceutical; food; cosmetic; prion neutralisation; anti-PrP-antibody; scrapie; bovine spongiform encephalopathy; BSE; mad cow disease; feline spongiform encephalopathy.				
Ovis sp.					Ovis sp.				
US2002150571-A1.					US2002150571-A1.				
17-OCT-2002.					17-OCT-2002.				
30-AUG-2001; 2001US-00943906.					30-AUG-2001; 2001US-00943906.				
14-SEP-1995; 95US-00528104.					14-SEP-1995; 95US-00528104.				
13-SEP-1996; 96US-00713939.					13-SEP-1996; 96US-00713939.				
06-MAR-1998; 98US-00036579.					06-MAR-1998; 98US-00036579.				
13-APR-2000; 2000US-00550374.					13-APR-2000; 2000US-00550374.				
(PRUS/) PRUSINER S B.					(PRUS/) PRUSINER S B.				
(WILL/) WILLIAMSON R A.					(WILL/) WILLIAMSON R A.				
(BURT/) BURTON D R.					(BURT/) BURTON D R.				
Prusiner SB, Williamson RA, Burton DR;					Prusiner SB, Williamson RA, Burton DR;				
WPI; 2003-198264/19.					WPI; 2003-198264/19.				

XX Novel antibody that has the ability to specifically bind to native prion
PT protein PrPsc in situ, useful for detecting human PrPsc in a source, for
PT determining the cause of death of an animal, or in therapy.
XX
PS Disclosure; Fig 4; 36pp; English.
XX
CC The invention describes an antibody (I) that has the ability to
CC specifically bind to native prion protein PrPsc in situ, where (I) is
CC produced by synthesizing a library of antibodies on phage, panning the
CC library against a sample by bringing the phage into contact with a
CC composition comprising PrP proteins, and isolating phage which bind PrPsc
CC protein. (I) is useful for: detecting human PrPsc in a source; for
CC determining the cause of death of an animal (e.g. scrapie, bovine
CC spongiform encephalopathy (BSE) or mad cow disease and feline spongiform
CC encephalopathy); for purifying a material suspected of containing PrPsc
CC protein, by contacting the material with a sufficient amount of (I) which
CC is bound to a support surface and removing material not bound to (I); for
CC treating a material by adding to the material a sufficient amount of (I)
CC to neutralise PrPsc protein infectivity; in an assay to screen for the
CC presence of prions (i.e. PrPsc) in products such as pharmaceuticals, food
CC or cosmetics, in prion neutralisation to purify a product, in extraction
CC of prion proteins, and in therapy. (I) provides a fast, efficient and
CC cost effective assay for detecting the presence of PrPsc in a sample, and
CC binds to a relatively high percentage of the infectious form of PrPsc.
CC This is the amino acid sequence of a prion protein used in the creation
CC of an anti-Prion protein-antibody
XX
SQ Sequence 255 AA;

Query Match 88.5%; Score 216; DB 6; Length 255;
Best Local Similarity 95.5%; Pred. No. 6.1e-16;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWWGGGSHSQWNKPSKPKPTNMKVAG-AAAGAVVGGIGGY 43
|||||
DB 88 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGGIGGY 130

RESULT 9

AAE33229

ID AAE33229 standard; protein; 255 AA.

XX AAE33229;

DT 02-MAY-2003 (first entry)

DE Ovine PrP protein.

KW Ovine; pathogenic; prion protein; PrPsc; kuru; Creutzfeldt-Jakob disease;

KW vaccine; neuroprotective; immunostimulant.

OS Ovis sp.

PN WO200287502-A2.

PD 07-NOV-2002.

PF 25-APR-2002; 2002WO-US013346.

PR 01-MAY-2001; 2001US-0287971P.

PA (REGC) UNIV CALIFORNIA.

PI Prusiner SB, Peretz D, Williamson RA, Burton DR;

DR WPI; 2003-140150/13.

PT Composition for clearing a disease conformation of a protein, especially
PT PrPsc protein, and treating, e.g., Creutzfeldt-Jakob disease comprises
PT molecules, e.g., antibodies which bind and prevent conversion to disease
PT conformation.

PS Disclosure; Page 38; 38pp; English.

CC The invention relates to composition for clearing a disease conformation
CC of a protein, especially pathogenic prion protein (PrPsc) from a cell.
CC The composition comprises molecules which bind a number of epitopes on a
CC first conformation of a protein, where the conversion to a second
CC conformation is prevented to allow a cell to clear protein in the second
CC conformation. The composition is useful for preventing or treating, e.g.,
CC kuru or Creutzfeldt-Jakob disease. It is also used as a vaccine. The
CC present sequence is ovine PrP protein
XX

SQ Sequence 255 AA;

Query Match 88.5%; Score 216; DB 6; Length 255;
Best Local Similarity 95.5%; Pred. No. 6.1e-16;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWWGGGSHSQWNKPSKPKPTNMKVAG-AAAGAVVGGIGGY 43
|||||
DB 88 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGGIGGY 130

RESULT 10

ADK15536

ID ADK15536 standard; protein; 255 AA.

XX ADK15536;

DT 06-MAY-2004 (first entry)

DE Ovine PrP(Sc), seq id 13.

KW Neuroprotective; prion disease; Cpg; prion protein; PrP;

KW transmissible spongiform encephalopathy; TSE; scrapie;

KW bovine spongiform encephalopathy; BSE; variant Creutzfeldt-Jakob disease;

XX vCJD; iatrogenic Creutzfeldt-Jakob disease; iCJD.

OS Ovis aries.

PN WO2004007743-A2.

PD 22-JAN-2004.

PF 17-JUL-2003; 2003WO-IB003727.

PR 17-JUL-2002; 2002US-0396432P.

PA (COLE-) COLEY PHARM GMBH.

PI Wagner H, Kretzschmar H, Sethi S;

DR WPI; 2004-122970/12.

PT Treating a prion disease, e.g. transmissible spongiform encephalopathy,

PT scrapie, bovine spongiform encephalopathy by administering a Cpg nucleic
PT acid to a subject having or at risk of developing prion disease.

PS Disclosure; SEQ ID NO 13; 57pp; English.

CC The invention relates to a method for treating a prion disease in a
CC subject, comprising administering to a subject having or at risk of
CC developing a prion disease a Cpg nucleic acid in an amount to treat the
CC prion disease. Also disclosed is a method for inducing an immune response
CC to a prion protein. The method is useful for treating prion disease, e.g.
CC transmissible spongiform encephalopathy (TSE), scrapie, bovine spongiform
CC encephalopathy (BSE), variant Creutzfeldt-Jakob disease (vCJD) or
CC iatrogenic Creutzfeldt-Jakob disease (iCJD). Sequences given in ADK15524-
CC ADK15538 represent prion proteins and nucleic acid sequences from various
CC species.
XX

SQ Sequence 255 AA;

Query Match 88.5%; Score 216; DB 8; Length 255;

Best Local Similarity 95.5%; Pred. No. 6.1e-16;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
DB 88 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGGY 130

RESULT 11

ID ADJ10165 standard; protein; 255 AA.

AC ADJ10165;

DT 18-NOV-2004 (first entry)

DE Sheep cellular prion protein (PrP) SegID 4.

KW sheep; PrP; prion protein; PrPsc; diagnostic assay; scrapie;
KW bovine spongiform encephalopathy; BSE; feline spongiform encephalopathy;
KW kuru; Creutzfeldt-Jacob disease; CJD; Gerstmann-Strassler-Scheinker; GSS;
KW fatal familial insomnia; FFI; neuroprotective.

OS Ovis sp.

PN US2003228303-A1.

PD 11-DEC-2003.

PF 09-MAY-2003; 2003US-00435602.

PR 14-SEP-1995; 95US-00528104.

PR 13-SEP-1996; 96US-00713939.

PR 06-MAR-1998; 98US-00036579.

PR 13-APR-2000; 2000US-00550374.

PR 30-AUG-2001; 2001US-00943906.

PA (REGC) UNIV CALIFORNIA.

PA (SCRI) SCRIPPS RES INST.

PI Prusiner SB, Williamson RA, Burton DR;

DR WPI; 2004-060976/06.

XX New antibody that binds to the scrapie isoform of prion protein (PrPsc),

XX useful for treating scrapie, bovine spongiform encephalopathies, feline

XX spongiform encephalopathies, kuru or Creutzfeldt-Jacob Diseases.

PS Disclosure; SEQ ID NO 4; 55pp; English.

CC This invention relates to novel antibodies that bind in situ to the
CC scrapie isoform of the prion protein (PrPsc). Specifically, it refers to
CC antibodies produced by phage display methodology that show a high degree
CC of binding affinity and specificity, and can neutralise the infectivity
CC of prions. The present invention describes using labelled antibodies for
CC an in vivo diagnostic assay that can be used to determine the presence of
CC human PrPsc proteins that are associated with a particular disease.
CC Accordingly, they are also useful for treating prion protein diseases
CC including scrapie, bovine spongiform encephalopathy (BSE), feline
CC spongiform encephalopathy, as well as prion diseases of humans including
CC kuru, Creutzfeldt-Jacob disease (CJD), Gerstmann-Strassler-Scheinker
CC Disease (GSS) or fatal familial insomnia (FFI). As such, these
CC compositions exhibit neuroprotective activity. This polypeptide sequence
CC is the sheep prion protein (PrP) of the invention.

XX Sequence 255 AA;

Query Match 88.5%; Score 216; DB 8; Length 255;
Best Local Similarity 95.5%; Pred. No. 6.1e-16;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
|||||

DB 88 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGGY 130

RESULT 12

AAP93674

ID AAP93674 standard; protein; 256 AA.

AC AAP93674;

DT 31-MAY-1990 (first entry)

DE Sheep PrP gene for scrapie susceptibility.

KW Scrapie; PrP gene; Bovine spongiform encephalopathy; BSE;
KW scrapie associated fibrils; SAF.

OS Cricetulus sp.

PN WO8911545-A.

PD 30-NOV-1989.

PF 15-MAY-1989; 89WO-GB000522.

PR 17-MAY-1988; 88GB-00011608.

PA (ANIM-) ANIMAL HEALTH LTD.

PI Hope J, Hunter N;

DR WPI; 1989-370736/50.

DR N-PSDB; AAN92735.

PT Detecting susceptibility to scrapie in sheep, cattle and goats - by

PT analysing blood or tissue for polymorphism linked to susceptibility,

PT pref. using DNA hybridisation probe.

PS Disclosure; Page; 46pp; English.

CC Sheep PrP gene product, in negative line sheep (scrapie resistant) a 5.0

CC kb HindIII hybridised to probe pEA974, positive line sheep showed either

CC a 3.4 kb HindIII or both 5.0 and 3.4 kb fragments. The specification

CC gives three reading frames after base 1410. See also AAN92734

XX Sequence 256 AA;

OY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43

DB 89 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGGY 131

RESULT 13
AAB72362
ID AAB72362 standard; peptide; 256 AA.

AC AAB72362;

DT 11-SEP-2003 (revised)

DT 17-MAY-2001 (first entry)

DE Sheep prion protein cellular form (PrPc) amino acid sequence.

KW Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
KW prion disease; spongiform encephalopathies; Scrapie; sheep;
KW bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.

OS Ovis aries.
FH Key Location/Qualifiers

FT Region 176. .221
/note="Stable region, specifically claimed in claim 3"
FT XX WO200107479-A2.
PN XX
XX 01-FEB-2001.
PD XX
XX 25-JUL-2000; 2000WO-GB002873.
PF XX
XX 27-JUL-1999; 99GB-00017491.
PR 30-JUL-1999; 99GB-00017878.
XX
PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
PI Collinge J, Clarke AR, Waltho JP, Jackson GS, Hosszu LLP;
XX WPI; 2001-168538/17.
DR
XX
PT New prion peptide for treating, preventing and/or diagnosing prion
PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
PT cows and Creutzfeldt-Jakob disease in humans.
XX
XX Claim 3; Fig 5; 69pp; English.
PS
XX
CC This invention relates to a peptide fragment of a cellular form of prion
CC protein PrPc located around a disulphide bond found in PrPc. The stable
CC structure is a specific marker of PrPc but not soluble prion protein
CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
CC or binding agent that binds PrPc. The antibody is used to detect or
CC remove PrPc, and may be used in preventative medicine. The antibody may
CC be used in the prevention, treatment or diagnosis of a prion disease,
CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
CC (CJD) in humans. The present sequence represents the cellular form of
CC sheep prion protein, the stable region of the protein may be used in the
CC production of anti-PrPc antibodies. (Updated on 11-SEP-2003 to
CC standardise OS field)
CC
XX
SQ Sequence 256 AA;

Query Match 88.5%; Score 216; DB 4; Length 256;
Best Local Similarity 95.5%; Pred. No. 6.1e-16;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGGLGGY 43
|||
Db 89 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGGLGGY 131

RESULT 14
AAB72365
ID AAB72365 standard; peptide; 256 AA.
XX
AC AAB72365;
XX
DT 17-MAY-2001 (first entry)
XX
XX Goat prion protein cellular form (PrPc) amino acid sequence.
DB
XX Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
KW prion disease; spongiform encephalopathies; Scrapie; goat;
KW bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
XX
XX Capra hircus.
OS
XX
FH Key Location/Qualifiers
FT Region 176. .221
FT /note="Stable region, specifically claimed in claim 3"
XX
PN WO200107479-A2.
XX
PD 01-FEB-2001.
XX

PF 25-JUL-2000; 2000WO-GB002873.
XX
PR 27-JUL-1999; 99GB-00017491.
PR 30-JUL-1999; 99GB-00017878.
XX
PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
PI Collinge J, Clarke AR, Waltho JP, Jackson GS, Hosszu LLP;
XX WPI; 2001-168538/17.
DR
XX
PT New prion peptide for treating, preventing and/or diagnosing prion
PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
PT cows and Creutzfeldt-Jakob disease in humans.
XX
XX Claim 3; Fig 5; 69pp; English.
PS
XX
CC This invention relates to a peptide fragment of a cellular form of prion
CC protein PrPc located around a disulphide bond found in PrPc. The stable
CC structure is a specific marker of PrPc but not soluble prion protein
CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
CC or binding agent that binds PrPc. The antibody is used to detect or
CC remove PrPc, and may be used in preventative medicine. The antibody may
CC be used in the prevention, treatment or diagnosis of a prion disease,
CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
CC (CJD) in humans. The present sequence represents the cellular form of
CC goat prion protein, the stable region of the protein may be used in the
CC production of anti-PrPc antibodies
CC
XX
SQ Sequence 256 AA;

Query Match 88.5%; Score 216; DB 4; Length 256;
Best Local Similarity 95.5%; Pred. No. 6.1e-16;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGGLGGY 43
|||
Db 89 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGGLGGY 131

RESULT 15
AAE08571
ID AAE08571 standard; protein; 256 AA.
XX
AC AAE08571;
XX
DT 15-NOV-2001 (first entry)
XX
XX Sheep prion protein.
DE
XX Aberrant prion gene; heart anomaly; cardiac pharmaceutical; Prnp;
KW life-style related disease; sheep.
XX
XX Ovis sp.
OS
XX
PN EP1120655-A2.
PN
PD 01-AUG-2001.
PD
XX 26-JAN-2001; 2001EP-00300723.
PF
XX 27-JAN-2000; 2000JP-00019195.
PR
XX
XX (RIKE) RIKEN KK.
PA
XX
XX Itohara S, Onodera T, Tsubone H;
PI
XX WPI; 2001-524142/58.
DR
DR N-PSDB; AAD15273.
XX
XX
PT Detecting aberrant animal-derived prion gene, by introducing prion gene
PT of an animal into a mouse to produce a prion gene modified mouse and

PT determining whether the prion gene modified mouse exhibits a heart
PT anomaly.

XX
PS Disclosure; Fig 2; 27pp; English.

XX The invention relates to a method which is used for detecting aberrant
CC animal-derived prion gene. The method involves introducing Oryx demmah
CC prion gene (Or-prnp) into a mouse to produce a prion gene modified mouse
CC and determining whether the prion gene modified mouse exhibit heart
CC anomalies. The prion gene modified mouse is useful for development and
CC safety testing of cardiac pharmaceuticals for human and animals having
CC underlying diseases or life-style related diseases. It is also useful for
CC detecting a drug, which reduces abnormal waves in an electrocardiogram.

XX The present sequence is sheep prion protein
SQ Sequence 256 AA;

Query Match 88.5%; Score 216; DB 4; Length 256;
Best Local Similarity 95.5%; Pred. No. 6.1e-16;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGQGGSHSQMNKPSKPPKTNMKHVAG-AAAGAVVGGIGGY 43
|||
Db 89 GGGGWWGQGGSHSQMNKPSK-PKTNMKHVAGAAAGAVVGGIGGY 131

Search completed: March 4, 2005, 11:06:40
Job time : 73 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 4, 2005, 11:05:21 ; Search time 16 Seconds
(without alignments)
258.583 Million cell updates/sec

Title: US-09-939-780-3
Perfect score: 244
Sequence: 1 GGGGWWGGGSHSQWNKPKSPK.....NMKRVAGAAAGAVVGLGGY 43

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 79:*
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	216	88.5	256	2 JT0268	major prion protei
2	216	88.5	256	2 S37149	prion protein - go
3	216	88.5	256	2 A54281	major prion protei
4	209	85.7	264	2 A54330	major prion protei
5	209	85.7	264	2 S37137	prion protein - gr
6	196.5	80.5	252	2 S53634	major prion protei
7	195.5	80.1	257	2 JQ1900	major prion protei
8	193.5	79.3	241	2 S71048	major prion protei
9	193.5	79.3	253	1 UOHU	major prion protei
10	193.5	79.3	253	2 S53617	major prion protei
11	193.5	79.3	253	2 S53635	prion protein - si
12	193.5	79.3	253	2 S53614	major prion protei
13	193.5	79.3	253	2 I37032	major prion protei
14	193.5	79.3	253	2 I61847	major prion protei
15	193.5	79.3	253	2 S53616	major prion protei
16	193.5	79.3	254	2 A34759	prion protein - Ch
17	193	79.1	252	2 JG6175	prion protein - ra
18	190.5	78.1	232	2 S71041	major prion protei
19	190.5	78.1	239	2 S53633	major prion protei
20	190.5	78.1	252	2 I61848	major prion protei
21	190.5	78.1	254	1 UOHYIH	major prion Prp-Sc
22	190.5	78.1	254	2 A23544	major prion protei
23	190.5	78.1	260	2 S53629	major prion protei
24	188.5	77.3	252	2 S53631	major prion protei
25	188.5	77.3	253	2 S53618	major prion protei
26	188.5	77.3	253	2 S53619	major prion protei
27	186.5	76.4	226	2 A53892	prion-related prot
28	182.5	74.8	254	2 B34759	prion protein - go
29	180.5	74.0	245	2 S53627	major prion protei

30	180.5	74.0	245	2 S71045	major prion protei
31	180.5	74.0	253	2 S53624	major prion protei
32	180.5	74.0	253	2 S53623	major prion protei
33	180.5	74.0	253	2 S53620	major prion protei
34	180.5	74.0	253	2 S53625	major prion protei
35	180.5	74.0	253	2 I84423	major prion protei
36	180.5	74.0	253	2 S71055	major prion protei
37	179	73.4	257	2 A23545	major prion Prp27-
38	177.5	72.7	241	2 S71056	major prion protei
39	150	61.5	267	1 UUCH	major prion protei
40	150	61.5	267	2 A37372	prion protein homo
41	150	61.5	273	2 A46280	prion protein - ch
42	78.5	32.2	180	2 JG7876	prion protein homo
43	75	30.7	440	2 S71795	transcription fact
44	73	29.9	403	2 A53662	homeotic protein H
45	71.5	29.3	346	1 S35500	heterogeneous ribo

ALIGNMENTS

RESULT 1
JT0268
major prion protein 2 precursor - bovine
N:Alternate names: prion protein, short variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C>Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004
C:Accession: JT0268
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JRPID, November 1991
A:Reference number: JT0952
A:Accession: JT0268
A:Molecule type: DNA
A:Residues: 1-256 <YOS>
A:Cross-references: UNIPROT:Q01880
C:Superfamily: major prion protein
C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
F:1-24/Domain: signal sequence #status predicted <SIG>
F:25-256/Product: major prion protein 2 #status predicted <MAT>
F:60-91/Region: 8-residue repeats
F:182-217/Diulfide bonds: #status predicted
F:184,200/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 88.5%; Score 216; DB 2; Length 256;
Best Local Similarity 95.5%; Pred. No. 6.4e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPKPKPTNMKRVAG-AAAGAVVGLGGY 43
DB 89 GGGGWWGGGSHSQWNKPK-PKTNMKRVAGAAAGAVVGLGGY 131

RESULT 2
S37149
prion protein - goat
C:Species: Capra aegagrus hircus (domestic goat)
C>Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C:Accession: S37149
R:Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
submitted to the EMBL Data Library, August 1993
A:Reference number: S37137
A:Accession: S37149
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-256 <MAR>
A:Cross-references: UNIPROT:P52113; EMBL:X74758; NID:g400442; PIDN:CA52774.1; PID:g4004
C:Superfamily: major prion protein

Query Match 88.5%; Score 216; DB 2; Length 256;
Best Local Similarity 95.5%; Pred. No. 6.4e-17;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPKPKPTNMKRVAG-AAAGAVVGLGGY 43

|||||
89 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGGY 131

RESULT 3

A54281
major prion protein - sheep
C/Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C/Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C/Accession: A54281; A35983
R/Westaway, D.; Zuliani, V.; Cooper, C.M.; Da Costa, M.; Neuman, S.; Jenny, A.L.; Detwill
Genes Dev. 8, 959-969, 1994
A/Title: Homozygosity for prion protein alleles encoding glutamine-171 renders sheep sus
A/Reference number: A54281; MUID:95011594; PMID:7926780
A/Accession: A54281
A/Molecule type: DNA
A/Residues: 1-256 <WES>
A/Cross-references: UNIPROT:O46648; GB:X79912; NID:g510442; PIDN:CAA56283.1; PID:g117158
R/Goldmann, W.; Hunter, N.; Foster, J.D.; Salbaum, J.M.; Beyreuther, K.; Hope, J.
Proc. Natl. Acad. Sci. U.S.A. 87, 2476-2480, 1990
A/Title: Two alleles of a neural protein gene linked to scrapie in sheep.
A/Reference number: A35983; MUID:90207218; PMID:1969635
A/Accession: A35983
A/Molecule type: DNA
A/Residues: 1-170,'R',172-256 <GOL>
A/Cross-references: GB:M31313; NID:g166039; PIDN:AAB97765.1; PID:g166040
C/Superfamily: major prion protein

Query Match	88.5%;	Score 216;	DB 2;	Length 256;
Best Local Similarity	95.5%;	Pred. No. 6.4e-17;		
Matches	42;	Conservative 0;	Mismatches 0;	Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
Db 89 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGGY 131

RESULT 4

A54330

major prion protein 1 precursor - bovine
N/Alternate names: prion protein, long variant; Prp protein

C/Species: Bos primigenius taurus (cattle)
C/Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Jul-2004
C/Accession: A54330; JT0953; JT0952; A48551; S07347; I46931
R/Goldmann, W.; Hunter, N.; Martin, T.; Dawson, M.; Hope, J.
J. Gen. Virol. 72, 201-204, 1991
A/Title: Different forms of the bovine Prp gene have five or six copies of a short, G-C-
A/Reference number: A54330; MUID:91116314; PMID:1671225
A/Accession: A54330
A/Molecule type: DNA

A/Residues: 1-264 <GOL>
A/Cross-references: UNIPROT:P10279; GB:X55882; NID:g6683; PIDN:CAA39368.1; PID:g684
R/Yoshimoto, J.; Ihnuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A/Reference number: JT0952
A/Accession: JT0953
A/Molecule type: DNA

A/Residues: 1-264 <YOS>
A/Cross-references: GB:D10613; NID:g217595; PIDN:BAA01468.1; PID:g217596
A/Accession: JT0952
A/Molecule type: DNA

A/Residues: 1-217,'K',219-264 <YO2>
R/Yoshimoto, J.; Ihnuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
Virus Genes 6, 343-356, 1992
A/Title: Comparative sequence analysis and expression of bovine Prp gene in mouse L-929
A/Reference number: A48551; MUID:93118243; PMID:1362024
A/Accession: A48551
A/Molecule type: mRNA

A/Residues: 1-217,'K',219-264 <YO3>
A/Cross-references: GB:AB001468; NID:g1888342; PIDN:BAA19253.1; PID:g1888343
A/Experimental source: brain
A/Note: sequence extracted from NCBI backbone (NCBIN:121620, NCBI:P121621)
R/Hope, J.; Reekie, L.J.D.; Hunter, N.; Multhaup, G.; Beyreuther, K.; White, H.; Scott,

Nature 336, 390-392, 1988
A/Title: Fibrils from brains of cows with new cattle disease contain scrapie-associated
A/Reference number: S07347; MUID:89057122; PMID:2904126
A/Accession: S07347
A/Molecule type: protein

A/Residues: 25-36 <HOP>
R/Prusiner, S.B.; Fuzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriel,
J. Infect. Dis. 167, 602-613, 1993
A/Title: Immunologic and molecular biologic studies of prion proteins in bovine spongifo
A/Reference number: I46931; MUID:93179783; PMID:8440932
A/Accession: I46931
A/Status: preliminary; translated from GB/EMBL/DDBJ

A/Molecule type: mRNA
A/Residues: 1-264 <PRU>
A/Cross-references: GB:S55629; NID:g266111; PIDN:AAB25514.1; PID:g266112
C/Genetics:

A/Gene: Prp
C/Superfamily: major prion protein
C/Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
R/1-24/Domain: signal sequence #status predicted <SIG>
F/25-264/Product: major prion protein 1 #status predicted <MAT>
F/60-99/Region: 8-residue repeats (W-G-Q-P-H-G-G-G)
F/190-225/Disulfide bonds: #status predicted
F/192,208/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match	85.7%;	Score 209;	DB 2;	Length 264;
Best Local Similarity <td>90.9%;<td>Pred. No. 4e-16;<td></td><td></td></td></td>	90.9%; <td>Pred. No. 4e-16;<td></td><td></td></td>	Pred. No. 4e-16; <td></td> <td></td>		
Matches <td>40;<td>Conservative 1;<td>Mismatches 1;<td>Indels 2; Gaps 2;</td></td></td></td>	40; <td>Conservative 1;<td>Mismatches 1;<td>Indels 2; Gaps 2;</td></td></td>	Conservative 1; <td>Mismatches 1;<td>Indels 2; Gaps 2;</td></td>	Mismatches 1; <td>Indels 2; Gaps 2;</td>	Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
Db 97 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGGY 139

RESULT 5

S37137

prion protein - greater kudu

C/Species: Tragelaphus strepsiceros (greater kudu)
C/Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C/Accession: S37137
R/Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
submitted to the EMBL Data Library, August 1993
A/Reference number: S37137
A/Accession: S37137
A/Status: preliminary
A/Molecule type: DNA

A/Residues: 1-264 <MAR>
A/Cross-references: UNIPROT:P40242; EMBL:X74771; NID:g398937; PIDN:CAA52781.1; PID:g398
C/Superfamily: major prion protein

Query Match	85.7%;	Score 209;	DB 2;	Length 264;
Best Local Similarity <td>90.9%;<td>Pred. No. 4e-16;<td></td><td></td></td></td>	90.9%; <td>Pred. No. 4e-16;<td></td><td></td></td>	Pred. No. 4e-16; <td></td> <td></td>		
Matches <td>40;<td>Conservative 1;<td>Mismatches 1;<td>Indels 2; Gaps 2;</td></td></td></td>	40; <td>Conservative 1;<td>Mismatches 1;<td>Indels 2; Gaps 2;</td></td></td>	Conservative 1; <td>Mismatches 1;<td>Indels 2; Gaps 2;</td></td>	Mismatches 1; <td>Indels 2; Gaps 2;</td>	Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
Db 97 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGGY 139

RESULT 6

S53634

major prion protein - common marmoset

C/Species: Callithrix jacchus (common marmoset)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S53634; S71047
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.B.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53634
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-252 <SCH>

A;Cross-references: UNIPROT:P40247; EMBL:U08304
R;Schatzl, H.M.
Submitted to the EMBL Data Library, April 1994
A;Reference number: S71041
A;Accession: S71047
A;Molecule type: DNA
A;Residues: 1-209,'E',211-252 <SCW>
A;Cross-references: EMBL:U08304; NID:g474366; PIDN:AAC50092.1; PID:g474367
C;Superfamily: major prion protein
C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 80.5%; Score 196.5; DB 2; Length 252;
Best Local Similarity 90.9%; Pred. No. 9.5e-15;
Matches 40; Conservative 1; Mismatches 0; Indels 3; Gaps 3;

Oy 2 GGGWGQ-GGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
||||| :||| ||||| ||||| ||||| ||||| |||||
Db 85 GGGWGQGGGTHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 127

RESULT 7
JQ1900
major prion protein precursor - European mink
C;Species: Mustela lutreola (European mink)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 21-Jul-2000
C;Accession: JQ1900
R;Kretzschmar, H.A.; Neumann, M.; Riethmüller, G.; Prusiner, S.B.
J. Gen. Virol. 73, 2757-2761, 1992
A;Title: Molecular cloning of a mink prion protein gene.
A;Reference number: JQ1900; MUID:93019035; PMID:1383401
A;Accession: JQ1900
A;Molecule type: DNA
A;Residues: 1-257 <KRE>
A;Cross-references: GB:S46825; NID:g258137; PIDN:AAB23801.1; PID:g258138
A;Experimental source: liver
C;Genetics:
A;Gene: PrP
C;Superfamily: major prion protein
F;1-24/Domain: signal sequence #status predicted <SIG>
F;25-257/Product: major prion protein #status predicted <MAT>

Query Match 80.1%; Score 195.5; DB 2; Length 257;
Best Local Similarity 88.9%; Pred. No. 1.3e-14;
Matches 40; Conservative 0; Mismatches 2; Indels 3; Gaps 3;

Oy 1 GGGWGQ-GGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
||||| :||| ||||| ||||| ||||| ||||| |||||
Db 89 GGGWGQGGGTHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 132

RESULT 8
S71048
major prion protein - Callipebus moloch (fragment)
C;Species: Callipebus moloch
C;Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C;Accession: S71048; S53632
R;Schatzl, H.M.
Submitted to the EMBL Data Library, April 1994
A;Reference number: S71041
A;Accession: S71048
A;Molecule type: DNA
A;Residues: 1-241 <SCH>
A;Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g4755
R;Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.B.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A;Title: Prion protein gene variation among primates.
A;Reference number: S53614; MUID:95139066; PMID:7837269
A;Accession: S53632
A;Status: nucleic acid sequence not shown
A;Molecule type: DNA
A;Residues: 1-203,'R',205-240 <SCW>
A;Cross-references: EMBL:U08312
C;Superfamily: major prion protein

C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 79.3%; Score 193.5; DB 2; Length 241;
Best Local Similarity 88.6%; Pred. No. 2e-14;
Matches 39; Conservative 2; Mismatches 0; Indels 3; Gaps 3;

Oy 2 GGGWGQ-GGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
||||| :||| ||||| ||||| ||||| ||||| |||||
Db 79 GGGWGQGGGTHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 121

RESULT 9
U081
major prion protein precursor - human
N;Alternate names: 11K amyloid protein; 27-30K sialoglycoprotein; PrP 27-30; PrP 33-35C
C;Species: Homo sapiens (man)
C;Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C;Accession: A24173; A40372; A05017; S14078; I54322; I68597; I58135; I59184; I79633; I7
R;Kretzschmar, H.A.; Stowring, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.; D
DNA 5, 315-324, 1986
A;Title: Molecular cloning of a human prion protein cDNA.
A;Reference number: A24173; MUID:86300093; PMID:3755672
A;Accession: A24173
A;Molecule type: mRNA
A;Residues: 1-253 <KRE>
A;Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g19046
R;Puckett, C.; Concannon, P.; Casey, C.; Hood, L.
Am. J. Hum. Genet. 49, 320-329, 1991
A;Title: Genomic structure of the human prion protein gene.
A;Reference number: A40372; MUID:91328137; PMID:1678248
A;Accession: A40372
A;Status: not compared with conceptual translation
A;Molecule type: DNA
A;Residues: 1-80,89-253 <PUC>
A;Cross-references: GB:X83416; NID:g747846; PIDN:CAA58442.1; PID:g747847
A;Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not
R;Liao, Y.C.J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
Science 233, 364-367, 1986
A;Reference number: A05017; MUID:86261778; PMID:3014653
A;Accession: A05017
A;Molecule type: mRNA
A;Residues: 8-117,119-253 <LIA>
A;Cross-references: GB:D00015; NID:g220015; PIDN:BAA00011.1; PID:g220016; GB:M13667; NI
R;Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlo
EMBO J. 10, 513-519, 1991
A;Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) i
A;Reference number: S14078; MUID:91160504; PMID:1672107
A;Accession: S14078
A;Molecule type: protein
A;Residues: 58-72,'X',74-76,'XX',79,'XXX',83-86,111-128,'V',130-150 <TAG>
R;Diedrich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A;Title: Deletion in the prion protein gene in a demented patient.
A;Reference number: I54322; MUID:93250789; PMID:1363802
A;Accession: I54322
A;Status: preliminary; translated from GB/EMBL/DBD
A;Molecule type: DNA
A;Residues: 9-83,92-240 <RES>
A;Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A;Accession: I68597
A;Status: translated from GB/EMBL/DBD
A;Molecule type: DNA
A;Residues: 8-240 <RE3>
A;Cross-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R;Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.;
Neurology 42, 422-427, 1992
A;Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutati
A;Reference number: I58135; MUID:92140671; PMID:1736177
A;Accession: I58135
A;Status: preliminary; translated from GB/EMBL/DBD
A;Molecule type: DNA
A;Residues: 51-91,'PHGGWGQPHGGWGQPHGGWGQPHGGWGQPHGGWGQPHGGG' <RE2>
A;Cross-references: GB:S80539; NID:g244698; PIDN:AAB21334.1; PID:g244699

R;Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldgaber, D.; Swergold, G.D.; Wills, P.R.; Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A/Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, and nine amino acid repeats
A/Reference number: 159184; MUID:92073400; PMID:1683708
A/Accession: 159184
A/Status: translated from GB/EMBL/DBBJ
A/Molecule type: DNA
A/Residues: 60-67 <GOL>
A/Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID:g239879
C/Genetics:
A/Gene: GDB:PRNP; CJD; PRIP
A/Cross-references: GDB:120720; OMIM:176640; OMIM:137440
A/Map position: 20pter-20p12
A/Introns: #status absent
A/Note: one intron occurs before the initiator codon
A/Note: this gene is associated with Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler-Scheutler disease, and variant Creutzfeldt-Jakob disease
C/Superfamily: major prion protein
C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidylcholine; prion; scrapie
F/1-22/Domain: signal sequence #status predicted <SIG>
F/23-230/Product: major prion protein #status predicted <MAT>
F/54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
F/231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F/179-214/Disulfide bonds: #status predicted
F/181.197/Binding site: carboxydrate (Asn) (covalent) #status predicted
F/230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match	79.3%	Score 193.5;	DB 1;	Length 253;
Best Local Similarity	88.6%;	Pred. No. 2.1e-14;		
Matches 39;	Conservative 2;	Mismatches 0;	Indels 3;	Gaps 3;

Qy 2 GGGWQ-QGSHSQMKPKPKTNMKNHVG-AAAGAVVGLIGY 43
||| | : ||| | | | | | | | | | | | | | |
Dd 86 GCGWGQGSGTTHSQMKPKPK-TNTNMKHMAGAALAAAGAVVGLIGY 128

RESULT 10
\$53617

major prion protein - common gibbon
C/Species: Hylobates lar (common gibbon, white-handed gibbon)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2000
C/Accession: S53617, S71050
J. Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53617
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: UNIPROT:P61766; EMBL:U08299
R/Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71050
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-references: EMBL:U08299; NID:g474356; PIDN:AAC50088.1; PID:g474357
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match	79.3%;	Score 193.5;	DB 2;	Length 253;
Best Local Similarity	88.6%;	Pred. No. 2.1e-14;		
Matches 39;	Conservative 2;	Mismatches 0;	Indels 3;	Gaps 3;

QY 2 GGGWGD-GGSHSQMKPSPKPTNMKVAG-AAAGAVVGLGGY 43
|||:|||||:|||||
Db 86 GGGWGGGGGTHSQMKPSPK-PTNMKVMAAGAAAGAVVGLGGY 128

RESULT 11
S53635
prion protein - siamang
C;Species: Hylobates syndactylus (siamang)

C;Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 09-Jul-2004
C;Accession: S53635
R;Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A;Title: Prion protein gene variation among primates.
A;Reference number: S53614; MUID:95139066; PMID:7837269
A;Accession: S53635
A;Status: nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-253 <SCH>
A;Cross-references: UNIPROT:P61767; EMBL:U08308; NID:G474374; PIDN:AAC50096.1; PID:G474
A;Note: the source was designated as Symphalangus syndactylus
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, April 1994
C;Superfamily: major prion protein

Query Match	79.3%;	Score 193.5;	DB 2;	Length 253;
Best Local Similarity	88.6%;	Pred. No. 2.1e-14;		
Matches 39;	Conservative 2;	Mismatches 0;	Indels 3;	Gaps 3;

Oy 2 GGGWGO-GGSHSOWNKPSKPKTNMKHVAG-AAAGAATVCGIGGY 43
||||| : ||||| ||||| : ||||| ||||| |||||
Db 86 GGGWGOGGGTSHSOWNKPSK-PKTNNKMAGAAAGAATVCGIGGY 128

RESULT 12

major prion protein - gorilla
C;Species: Gorilla gorilla (gorilla)
C;Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C;Accession: S53614; S71049
R;Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A;Title: Prion protein gene variation among primates.
A;Reference number: S53614; MUID:95139066; PMID:7837269
A;Accession: S53614
A;Status: nucleic acid sequence not shown
A;Molecule type: DNA
A;Residues: 1-253 <SCH>
A;Cross-references: UNIPROT:P40252; EMBL:U08300
R;Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A;Reference number: S71041
A;Accession: S71049
A;Molecule type: DNA
A;Residues: 1-210, 'E', 212-253 <SCW>
A;Cross-references: EMBL:U08300; NID:g474358; PIDN:AAC50089.1; PID:g474359
C;Superfamily: major prion protein
C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match	79.3%;	Score 193.5;	DB 2;	Length 253;
Best Local Similarity	88.6%;	Pred. No. 2.1e-14;		
Matches 39;	Conservative 2;	Mismatches 0;	Indels 3;	Gaps 3;

QY 2 GGGWQ-GGSHSQWNKPSKPKTNMKHVAG-AAAGAVYGLGKY 43
|||||:|||||||:|||||||
Db 86 GGGWGGGGGTHSQWNKPSK-PKTNMKHMAGAAAGAVYGLGKY 128

RESULT 13
I37032

major prion protein precursor - gorilla
C/Species: Gorilla gorilla (gorilla)
C/Date: 31-May-1996 #sequence__revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: I37032
R/Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I37032
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:q563208; PIDN:AAA68633.1; PID:q563

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 4, 2005, 11:05:21 ; Search time 56 Seconds
(without alignments)
393.204 Million cell updates/sec

Title: US-09-939-780-3
Perfect score: 244
Sequence: 1 GGGGWWGGGSHSQWNKPSKP.....NMKHVAGAAAGAVGGLGGY 43

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Uniprot_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES:

Result No.	Score	Query Match	Length	DB ID	Description
1	216	88.5	181	2 097911	097911 budorcas ta
2	216	88.5	197	2 06RV12	06rv12 ovis aries
3	216	88.5	197	2 06RV13	06rv13 ovis aries
4	216	88.5	197	2 06RV14	06rv14 ovis aries
5	216	88.5	197	2 06RV15	06rv15 ovis aries
6	216	88.5	197	2 06RV16	06rv16 ovis aries
7	216	88.5	197	2 06RV16	06rv16 ovis aries
8	216	88.5	202	2 097908	097908 capra nubia
9	216	88.5	248	2 0866V0	0866v0 orycteropus
10	216	88.5	256	1 PRIO_BUDTA	095m08 budorcas ta
11	216	88.5	256	1 PRIO_CAPHI	P52113 capra hircu
12	216	88.5	256	1 PRIO_FELCA	O18754 felis silve
13	216	88.5	256	1 PRIO_OVICA	07jih3 ovis canade
14	216	88.5	256	1 PRIO_OVIMO	07jly2 vibos mosc
15	216	88.5	256	1 PRIO_OVIMU	07jk02 ovis orient
16	216	88.5	256	1 PRIO_SHEEP	P23907 ovis aries
17	216	88.5	256	1 PRP2_BOVIN	Q01880 bos taurus
18	216	88.5	256	2 046648	046648 capra hircu
19	216	88.5	256	2 08SPV5	08spv5 capra hircu
20	216	88.5	256	2 08SPV6	08spv6 capra hircu
21	216	88.5	256	2 08SPV7	08spv7 capra hircu
22	216	88.5	256	2 068G89	068g89 capra hircu
23	216	88.5	256	2 068G93	068g93 ovis aries
24	216	88.5	256	2 06V638	06v638 ovis aries
25	216	88.5	256	2 06V643	06v643 ovis aries
26	216	88.5	256	2 06V649	06v649 ovis aries
27	216	88.5	256	2 06V652	06v652 ovis aries
28	216	88.5	256	2 070KZ9	070kz9 ovis aries
29	216	88.5	256	2 070L02	070l02 ovis aries
30	216	88.5	256	2 0712V9	0712v9 ovis aries
31	216	88.5	256	2 0712W0	0712w0 ovis aries

32	216	88.5	256	2 0712W2	0712w2 ovis aries
33	216	88.5	256	2 0712W3	0712w3 ovis aries
34	216	88.5	256	2 0712W4	0712w4 ovis aries
35	216	88.5	256	2 09TTU5	09ttu5 ovis aries
36	216	88.5	256	2 09TU07	09tu07 ovis aries
37	216	88.5	256	2 09TV01	09tv01 capra hircu
38	213	87.3	185	2 097694	097694 cervus nip
39	213	87.3	195	2 097903	097903 addax nasom
40	213	87.3	204	2 097629	097629 odocoileus
41	213	87.3	204	2 09TS18	09ts18 odocoileus
42	213	87.3	211	2 077787	077787 antilocapra
43	213	87.3	212	2 097698	097698 cervus elap
44	213	87.3	220	2 002825	002825 odocoileus
45	213	87.3	220	2 07JU72	07jj72 odocoileus

ALIGNMENTS

RESULT 1					
ID	097911	PRELIMINARY;	PRT;	181 AA.	
AC	097911;				
DT	01-MAY-1999 (TrEMBLrel. 10, Created)				
DT	01-MAY-1999 (TrEMBLrel. 10, Last sequence update)				
DT	01-OCT-2003 (TrEMBLrel. 25, Last annotation update)				
DE	Prion protein (Fragment).				
GN	Name=Prp;				
OS	Budorcas taxicolor (Golden takin).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;				
OC	Caprinae; Budorcas.				
OX	NCBI_TaxID=37181;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RC	TISSUE=PBL;				
RX	MEDLINE=99303687; PubMed=10373359; DOI=10.1006/jmbi.1999.2831;				
RA	Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gluch S.,				
RA	Schwarz T.F., Werner T., Schatzl H.M.;				
RT	"Analysis of 27 mammalian and 9 avian PRPs reveals high conservation				
RT	of flexible regions of the prion protein.";				
RL	J. Mol. Biol. 289:1163-1178(1999).				
CC	-1- SIMILARITY: Belongs to the prion family.				
DR	EMBL; AF117326; AAD19997.1; -.				
DR	HSSP; P10279; 1DMY.				
DR	InterPro; IPR000817; Prion.				
DR	Pfam; PF00377; Prion; 1.				
DR	Pfam; PF03991; Prion octapep; 5.				
DR	SMART; SM00157; PrP; 1.				
DR	PROSITE; PS00291; PRION_1; 1.				
KW	Prion.				
FT	NON_TER 1				
FT	NON_TER 181				
SQ	SEQUENCE 181 AA; 19253 MW; A9001D086442E92A CRC64;				
Query Match					
Best local Similarity 88.5%; Score 216; DB 2; Length 181;					
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;					
Qy	1 GGGGWWGGGSHSQWNKPSKPPTNMKHVAG-AAAGAVGGLGGY 43				
Db	62 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAGAVGGLGGY 104				
RESULT 2					
ID	06RV12	PRELIMINARY;	PRT;	197 AA.	
AC	06RV12;				
DT	05-JUL-2004 (TrEMBLrel. 27, Created)				
DT	05-JUL-2004 (TrEMBLrel. 27, Last sequence update)				
DT	05-JUL-2004 (TrEMBLrel. 27, Last annotation update)				
DE	Prp protein (Fragment).				
GN	Name=prp;				

OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22685694; PubMed=12800515;
RA Tkacikova L., Hanusovska E., Novak M., Arvayova M., Mikula I.;
RT "The Prp genotype of sheep of the improved Valachian breed.";
RL Folia Microbiol. (Praha) 48:269-276(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY488862; AAR37333.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 197 197
SQ SEQUENCE 197 AA; 21141 MW; 2C5890A06F052F1F CRC64;

Query Match 88.5%; Score 216; DB 2; Length 197;
Best Local Similarity 95.5%; Pred. No. 1e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTKMKHVAG-AAAGAVVGLGKY 43
Db 84 GGGGWWGGGSHSQWNKPSK-PKTKMKHVAGAAAGAVVGLGKY 126

RESULT 3

ID Q6RV13 PRELIMINARY; PRT; 197 AA.
AC Q6RV13;
DT 05-JUL-2004 (TREMBLrel. 27, Created)
DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
DE Prp protein (Fragment).
GN Name=prp;
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22685694; PubMed=12800515;
RA Tkacikova L., Hanusovska E., Novak M., Arvayova M., Mikula I.;
RT "The Prp genotype of sheep of the improved Valachian breed.";
RL Folia Microbiol. (Praha) 48:269-276(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY488861; AAR37332.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 197 197
SQ SEQUENCE 197 AA; 21093 MW; 3D8E54D31F1A200F CRC64;

Query Match 88.5%; Score 216; DB 2; Length 197;
Best Local Similarity 95.5%; Pred. No. 1e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTKMKHVAG-AAAGAVVGLGKY 43

Db 84 GGGGWWGGGSHSQWNKPSK-PKTKMKHVAGAAAGAVVGLGKY 126

RESULT 4

ID Q6RV14 PRELIMINARY; PRT; 197 AA.
AC Q6RV14;
DT 05-JUL-2004 (TREMBLrel. 27, Created)
DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
DE Prp protein (Fragment).
GN Name=prp;
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22685694; PubMed=12800515;
RA Tkacikova L., Hanusovska E., Novak M., Arvayova M., Mikula I.;
RT "The Prp genotype of sheep of the improved Valachian breed.";
RL Folia Microbiol. (Praha) 48:269-276(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY488860; AAR37331.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 197 197
SQ SEQUENCE 197 AA; 21084 MW; 01775FAF7F1A200C CRC64;

Query Match 88.5%; Score 216; DB 2; Length 197;
Best Local Similarity 95.5%; Pred. No. 1e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWWGGGSHSQWNKPSKPKTKMKHVAG-AAAGAVVGLGKY 43
Db 84 GGGGWWGGGSHSQWNKPSK-PKTKMKHVAGAAAGAVVGLGKY 126

RESULT 5

ID Q6RV15 PRELIMINARY; PRT; 197 AA.
AC Q6RV15;
DT 05-JUL-2004 (TREMBLrel. 27, Created)
DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
DE Prp protein (Fragment).
GN Name=prp;
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22685694; PubMed=12800515;
RA Tkacikova L., Hanusovska E., Novak M., Arvayova M., Mikula I.;
RT "The Prp genotype of sheep of the improved Valachian breed.";
RL Folia Microbiol. (Praha) 48:269-276(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY488859; AAR37330.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_octapep; 5.

```
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
KM PRION.
FT NON_TER 1 1
FT NON_TER 197 197
SQ SEQUENCE 197 AA; 21112 MW; 2C588FAF7F1A200F CRC64;

Query Match
Best Local Similarity 88.5%; Score 216; DB 2; Length 197;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWCQGGSHSQWNKPSKPKPTNMKHVAG-AAAGAVVGILGY 43
Db 84 GGGGWCQGGSHSQWNKPSK-PKTNMKHVAGAAAAAGAVVGILGY 126

RESULT 6
Q6RVI6 PRELIMINARY; PRT; 197 AA.
AC Q6RVI6;
DT 05-JUL-2004 (TReMBLrel. 27, Created)
DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TReMBLrel. 27, Last annotation update)
DE PRP protein (Fragment).
GN Name=PRP;
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22685694; Pubmed=12800515;
RA Tkacikova L., Hanusovska E., Novak M., Arvayova M., Mikula I.;
RT "The PRP genotype of sheep of the improved Valachian breed.";
RL Folia Microbiol. (Praha) 48:269-276(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY488858; AAR37329.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
KM Prion.
FT NON_TER 1 1
FT NON_TER 197 197
SQ SEQUENCE 197 AA; 21113 MW; 017740A06F052F1C CRC64;

Query Match
Best Local Similarity 88.5%; Score 216; DB 2; Length 197;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWCQGGSHSQWNKPSKPKPTNMKHVAG-AAAGAVVGILGY 43
Db 84 GGGGWCQGGSHSQWNKPSK-PKTNMKHVAGAAAAAGAVVGILGY 126

RESULT 7
Q6RYR6 PRELIMINARY; PRT; 197 AA.
AC Q6RYR6;
DT 05-JUL-2004 (TReMBLrel. 27, Created)
DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TReMBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRP;
OS Ovis aries (Sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
```

```
OX NCBI_TaxID=9940;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22685694; Pubmed=12800515;
RA Tkacikova L., Hanusovska E., Novak M., Arvayova M., Mikula I.;
RT "The PRP genotype of sheep of the improved Valachian breed.";
RL Folia Microbiol. (Praha) 48:269-276(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY485346; AAR36137.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
KM Prion.
FT NON_TER 1 1
FT NON_TER 197 197
SQ SEQUENCE 197 AA; 21065 MW; 10A184D31F1A200C CRC64;

Query Match
Best Local Similarity 88.5%; Score 216; DB 2; Length 197;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWCQGGSHSQWNKPSKPKPTNMKHVAG-AAAGAVVGILGY 43
Db 84 GGGGWCQGGSHSQWNKPSK-PKTNMKHVAGAAAAAGAVVGILGY 126

RESULT 8
O97908 PRELIMINARY; PRT; 202 AA.
AC O97908;
DT 01-MAY-1999 (TReMBLrel. 10, Created)
DT 01-MAY-1999 (TReMBLrel. 10, Last sequence update)
DT 01-OCT-2003 (TReMBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRP;
OS Capra nubiana (Nubian ibex).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Capra.
OX NCBI_TaxID=72543;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE=99303687; Pubmed=10373359; DOI=10.1006/jmbi.1999.2831;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
of flexible regions of the prion protein."
J. Mol. Biol. 289:1163-1178(1999).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF117319; AAD19990.1; -.
DR HSSP; P23907; I604.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 5.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
FT NON_TER 1 1
FT NON_TER 202 202
SQ SEQUENCE 202 AA; 21949 MW; DB0634A43B4DB77F CRC64;

Query Match
Best Local Similarity 88.5%; Score 216; DB 2; Length 202;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGWCQGGSHSQWNKPSKPKPTNMKHVAG-AAAGAVVGILGY 43
```

Db 61 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGIGGY 103

RESULT 9

Q866V0 PRELIMINARY; PRT; 248 AA.
AC Q866V0;
DT 01-JUN-2003 (TrEMBLrel. 24, Created)
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Orycteropus afer (Aardvark).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Tubulidentata; Orycteropodidae; Orycteropus.
OX NCBI_TaxID=9818;
RN [1]

RP SEQUENCE FROM N.A.
RX MEDLINE=22408137; PubMed=12519913; DOI=10.1093/molbev/msg014;
RA van Rheede T., Smolenaars M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.",
RL Mol. Biol. Evol. 20:111-121(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY13058; AAN16512.1; -.
DR HSSP; P23907; 1G04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion_octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON TER 248 248
SQ SEQUENCE 248 AA; 26844 MW; B29D69FA8972AA2E CRC64;

Query Match
Best Local Similarity 88.5%; Score 216; DB 2; Length 248;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGIGGY 43
Db 90 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGIGGY 132

RESULT 10
PRIO_BUDTA
ID PRIO_BUDTA STANDARD; PRT; 256 AA.
AC Q95M08;
DT 25-OCT-2004 (Rel. 45, Created)
DT 25-OCT-2004 (Rel. 45, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Major prion protein precursor (PrP).
GN Name=PRNP;
OS Budorcas taxicolor (Golden takin).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Budorcas.
OX NCBI_TaxID=37181;
RN [1]

RP SEQUENCE FROM N.A.
RX PubMed=11805443; DOI=10.1159/000050072;
RA Seo S.W., Hara K., Kubosaki A., Nasu Y., Nishimura T., Saeki K.,
RA Matsumoto Y., Endo H., Onodera T.;
RT "Comparative analysis of the prion protein open reading frame
RT nucleotide sequences of two wild ruminants, the mouflon and golden
RT takin."
RL Intervirology 44:359-363(2001).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells (By
CC similarity).
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods" (By similarity).
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor (By

CC similarity).
CC -1- SIMILARITY: Belongs to the prion family.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----

DR EMBL; AB060290; BAB69957.1; -.
DR HSSP; P10279; 1DMY.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT SIGNAL 1 24
FT CHAIN 25 233 By similarity.
FT PROPEP 234 256 Major prion protein.
FT LIPID 233 233 Removed in mature form (Potential).
FT CARBOHYD 184 184 GPI-anchor amidated alanine (Potential).
FT CARBOHYD 200 200 N-linked (GlcNAc...) (Probable).
FT DISULFID 182 217 N-linked (GlcNAc...) (Probable).
FT DOMAIN 54 95 By similarity.
FT REPEAT 54 95 5 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 54 62 Q.
FT REPEAT 63 70 1.
FT REPEAT 71 78 2.
FT REPEAT 79 86 3.
FT REPEAT 87 95 4.
SQ SEQUENCE 256 AA; 27860 MW; 527E3232CD90BCD7 CRC64;

Query Match
Best Local Similarity 88.5%; Score 216; DB 1; Length 256;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGIGGY 43
Db 89 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGIGGY 131

RESULT 11
PRIO_CAPHI
ID PRIO_CAPHI STANDARD; PRT; 256 AA.
AC P52113;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP).
GN Name=PRNP; Synonyms=PRP;
OS Capra hircus (Goat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Capra.
OX NCBI_TaxID=9925;
RN [1]

RP SEQUENCE FROM N.A.
RC STRAIN=Anglo-Nubian; TISSUE=Peripheral blood lymphocytes;
RA Martin T.C., Hughes S.L., Hughes K.J., Dawson M.;
RL Submitted (SEP-1993) to the EMBL/GenBank/DBJ databases.
RN [2]

RP SEQUENCE FROM N.A., AND VARIANT MET-142.
RC STRAIN=Anglo-Nubian;
RX MEDLINE=97081203; PubMed=8922485;
RA Goldmann W., Martin T., Foster J., Hughes S., Smith G., Hughes K.,
RA Dawson M., Hunter N.;
RT "Novel polymorphisms in the caprine PrP gene: a codon 142 mutation

```

RT associated with scrapie incubation period.";
RL J. Gen. Virol. 77:2885-2891(1996).
RN [3]
RP ERRATUM.
RA Goldmann W., Martin T., Foster J., Hughes S., Smith G., Hughes K.,
RA Dawson M., Hunter N.;
RL J. Gen. Virol. 78:697-697(1997).
RN [4]
RP SEQUENCE FROM N.A.
RC STRAIN=African dwarf; TISSUE=Blood;
RX MEDLINE=96356540; PubMed=8746958;
RA Obermaier G., Kretzschmar H.A., Hafner A., Henbeck D., Dahme B.;
RT "Spongiform central nervous system myelinopathy in African dwarf
RT goats.";
RL J. Comp. Pathol. 113:357-372(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Polymorphism at position 171 may be related to the
CC alleles of scrapie incubation-control (SIC) gene in this species.
CC -1- DISEASE: Found in high quantity in the brain of humans and animals
CC infected with degenerative neurological diseases such as kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; X74758; CAA52774.1; -.
CC EMBL; X91999; CAA63050.1; -.
CC EMBL; S82626; AAD14409.1; -.
CC PIR; S37149; S37149.
CC HSSP; P23907; 1G04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF03991; Prion octapep; 5.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Polymorphism; Prion;
KW Repeat; Signal.
FT SIGNAL 1 24
FT CHAIN 25 233
FT PROBE 234 256
FT LIPID 233 233
FT CARBOHYD 184 184
FT CARBOHYD 200 200
FT DISULFID 182 217
FT DOMAIN 54 95
FT REPEAT 54 62
FT REPEAT 63 70
FT REPEAT 71 78
FT REPEAT 79 86
FT REPEAT 87 95
FT VARIANT 142 142
FT SEQUENCE 256 AA; 27897 MW; BDA5795F6FD99746 CRC64;
Q.
1.
2.
3.
4.
5.
I -> M (appears to be associated with
differing disease incubation periods in
goats experimentally infected with
isolates of bovine spongiform
encephalopathy or sheep scrapie).

```

```

Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
OY 1 GGGGWWGGGSHSQWNKPSKPKPTNMKVAG-AAAGAVVGLGCGY 43
Db 89 GGGGWWGGGSHSQWNKPSK-PKPTNMKVAGAAAAGAVVGLGCGY 131

RESULT 12
PRIO_FELCA STANDARD; PRT; 256 AA.
ID PRIO_FELCA
AC 018754; 019016;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP).
GN Name=PRNP; Synonyms=PRP;
OS Felis silvestris catus (Cat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Felidae; Felis.
OX NCBI_TaxID=9685;
[1]
SEQUENCE FROM N.A.
RP TISSUE=Blood, and Brain;
RA Rohrer R.G., Edelman D., Protzman J.L.;
RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
[2]
SEQUENCE OF 112-235 FROM N.A.
RP Taylor M.S., Newton D.J., Flanagan B.F., Christmas S.E.;
RL Submitted (JUN-1997) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -1- CAUTION: Ref.1 sequence seems to be incorrect, it is too close in
CC sequence to that of sheep to be taxonomically correct. We have
CC used Ref.2 sequence in the region where it is available (112-235),
CC but the rest of the sequence probably contains incorrect residues.
CC -1- DATABASE: NAME=Cat PrP; NOTE=Web page on cat sequence problems;
CC WWW="http://www.mad-cow.org/~tom/cat_prion.html".
-----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL Outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
-----
CC EMBL; AF003087; AAB70468.1; -.
CC EMBL; Y13698; CAA74032.1; -.
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF03991; Prion_octapep; 5.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT SIGNAL 1 24 By similarity.
FT CHAIN 25 233 Major prion protein.
FT PROPEP 234 256 Removed in mature form (Potential).
FT LIPID 233 233 GPI-anchor amidated alanine (Potential).
FT CARBOHYD 184 184 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 200 200 N-linked (GlcNAc...) (Potential).
FT DISULFID 182 217 By similarity.

```

```

FT DOMAIN 54 95 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 54 62 Q.
FT REPEAT 63 70 1.
FT REPEAT 71 78 2.
FT REPEAT 79 86 3.
FT REPEAT 87 95 4.
FT REPEAT 87 95 5.
FT CONFLICT 162 162 D -> N (in Ref. 1).
FT CONFLICT 180 180 R -> H (in Ref. 1).
FT CONFLICT 190 190 R -> H (in Ref. 1).
FT CONFLICT 206 206 M -> I (in Ref. 1).
FT CONFLICT 218 218 V -> I (in Ref. 1).
FT CONFLICT 223 223 K -> R (in Ref. 1).
FT CONFLICT 232 232 R -> G (in Ref. 1).
FT CONFLICT 235 235 A -> V (in Ref. 1).
SQ SEQUENCE 256 AA; 27975 MW; 7C687C3BCE6BEBB9 CRC64;

```

Query Match 88.5%; Score 216; DB 1; Length 256;
 Best Local Similarity 95.5%; Pred. No. 1.3e-15;
 Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

```

QY 1 GGGGWMGGGSHSQWNKPSKPKPTNMKVAG-AAAGAVVGGG 43
Db 89 GGGGWMGGGSHSQWNKPSK-PKTNMKVAGAAAAGAVVGGG 131

```

RESULT 13

```

ID PRIO_OVICA STANDARD; PRT; 256 AA.
AC Q7JIH3;
DT 25-OCT-2004 (Rel. 45, Created)
DT 25-OCT-2004 (Rel. 45, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Major prion protein precursor (Prp).
GN Name=PRNP;
OS Ovis canadensis (Bighorn sheep).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=37174;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA O'Rourke K.I., Spraker T.R., Wild M.A., Miller M.W.;
RT "Prp gene sequence for big horn sheep (Ovis canadensis).";
RL Submitted (JUL-1999) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells (By
CC similarity).
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods" (By similarity).
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor (By
CC similarity).
CC -1- SIMILARITY: Belongs to the prion family.

```

 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).

```

DR EMBL; AF166334; AAD48030.1; -.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT SIGNAL 1 24 By similarity.
FT CHAIN 25 233 Major prion protein.
FT PROPEP 234 256 Removed in mature form (Potential).
FT LIPID 233 233 GPI-anchor amidated alanine (Potential).
FT CARBOHYD 184 184 N-linked (GlcNAc. . .) (Probable).

```

```

FT CARBOHYD 200 200 N-linked (GlcNAc. . .) (Probable).
FT DISULFID 182 217 By similarity.
FT DOMAIN 54 95 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 54 62 Q.
FT REPEAT 63 70 1.
FT REPEAT 71 78 2.
FT REPEAT 79 86 3.
FT REPEAT 87 95 4.
FT REPEAT 87 95 5.
SQ SEQUENCE 256 AA; 27887 MW; BFC8E95F6FD99746 CRC64;

```

Query Match 88.5%; Score 216; DB 1; Length 256;
 Best Local Similarity 95.5%; Pred. No. 1.3e-15;
 Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

```

QY 1 GGGGWMGGGSHSQWNKPSKPKPTNMKVAG-AAAGAVVGGG 43
Db 89 GGGGWMGGGSHSQWNKPSK-PKTNMKVAGAAAAGAVVGGG 131

```

RESULT 14

```

ID PRIO_OVIMO STANDARD; PRT; 256 AA.
AC Q7JIY2;
DT 25-OCT-2004 (Rel. 45, Created)
DT 25-OCT-2004 (Rel. 45, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Major prion protein precursor (Prp).
GN Name=PRNP;
OS Ovis moschatus (Muskox).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Caprinae; Ovis.
OX NCBI_TaxID=37176;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99303687; PubMed=10373359; DOI=10.1006/jmbi.1999.2831;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gleich S.,
RA Schwarz T.F., Werner T., Scharzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells (By
CC similarity).
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods" (By similarity).
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor (By
CC similarity).
CC -1- SIMILARITY: Belongs to the prion family.

```

 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).

```

DR EMBL; AF117320; AAD1991.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT SIGNAL 1 24 By similarity.
FT CHAIN 25 233 Major prion protein.
FT PROPEP 234 256 Removed in mature form (Potential).
FT LIPID 233 233 GPI-anchor amidated alanine (Potential).

```

FT CARBOHYD 184 184 N-linked (GlcNAc. . .) (Probable).
 FT CARBOHYD 200 200 N-linked (GlcNAc. . .) (Probable).
 FT DISULFID 182 217 By similarity.
 FT DOMAIN 54 95 5 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 54 62 0.
 FT REPEAT 63 70 1.
 FT REPEAT 71 78 2.
 FT REPEAT 79 86 3.
 FT REPEAT 87 95 4.
 SQ SEQUENCE 256 AA; 27887 MW; BFC8E95F6FD99746 CRC64;
 Query Match 88.5%; Score 216; DB 1; Length 256;
 Best Local Similarity 95.5%; Pred. No. 1.3e-15;
 Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

Qy 1 GGGGQGQGGSHSQWNKPSKPKPTNMGVAG-AAAGAVVGLGKY 43
 |||||
 Db 89 GGGGQGQGGSHSQWNKPSK-PKTNMGVAGAAAGAVVGLGKY 131

FT DISULFID 182 217 By similarity.
 FT DOMAIN 54 95 5 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 54 62 0.
 FT REPEAT 63 70 1.
 FT REPEAT 71 78 2.
 FT REPEAT 79 86 3.
 FT REPEAT 87 95 4.
 SQ SEQUENCE 256 AA; 27887 MW; BFC8E95F6FD99746 CRC64;
 Query Match 88.5%; Score 216; DB 1; Length 256;
 Best Local Similarity 95.5%; Pred. No. 1.3e-15;
 Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

Qy 1 GGGGQGQGGSHSQWNKPSKPKPTNMGVAG-AAAGAVVGLGKY 43
 |||||
 Db 89 GGGGQGQGGSHSQWNKPSK-PKTNMGVAGAAAGAVVGLGKY 131

Search completed: March 4, 2005, 11:07:41
 Job time : 58 secs

RESULT 15
 PRIO_OVIMU
 ID_PRIO_OVIMU STANDARD; PRT; 256 AA.
 AC Q7JK02;
 DT 25-OCT-2004 (Rel. 45, Created)
 DT 25-OCT-2004 (Rel. 45, Last sequence update)
 DT 25-OCT-2004 (Rel. 45, Last annotation update)
 DE Major prion protein precursor (Prp).
 GN Name=PRNP;
 OS Ovis orientalis musimon (Mouflon).
 OC Eukaryota; Metazoa; Chordata; Cranialia; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Caprinae; Ovis.
 OC NCBI_TaxID=9938;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX PubMed=11805443; DOI=10.1159/000050072;
 RA Seo S.W., Hara K., Kubosaki A., Nasu Y., Nishimura T., Saeki K.,
 RA Matsumoto Y., Endo H., Onodera T.;
 RT "Comparative analysis of the prion protein open reading frame
 RT nucleotide sequences of two wild ruminants, the mouflon and golden
 RT takin.";
 RL Intervirology 44:359-363(2001).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells (By
 CC similarity).
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods" (By similarity).
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor (By
 CC similarity).
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.ebi.ac.uk/announcements>
 CC or send an email to license@ebi.ac.uk).
 CC -----
 DR EMBL; AB060288; BAB69955.1; -.
 DR EMBL; AB060289; BAB69956.1; -.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KW Signal.
 FT SIGNAL 1 24 By similarity.
 FT CHAIN 25 233 Major prion protein.
 FT PROPEP 234 256 Removed in mature form (Potential).
 FT LIPID 233 233 GPI-anchor amidated alanine (Potential).
 FT CARBOHYD 184 184 N-linked (GlcNAc. . .) (Probable).
 FT CARBOHYD 200 200 N-linked (GlcNAc. . .) (Probable).

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 4, 2005, 11:05:21 ; Search time 133 Seconds
(without alignments)
106.383 Million cell updates/sec

Title: US-09-939-780-3
Perfect score: 244
Sequence: 1 GGGGNGGSGSHSQWNKPSKP.....NMKHVAGAAAGAVGGLGCV 43

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1391452 seqs, 329044822 residues

Total number of hits satisfying chosen parameters: 1391452

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

- Database :
- 1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
 - 2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*
 - 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
 - 4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep.*
 - 5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep.*
 - 6: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep.*
 - 7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.*
 - 8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
 - 9: /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep.*
 - 10: /cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep.*
 - 11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep.*
 - 12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
 - 13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep.*
 - 14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep.*
 - 15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
 - 16: /cgn2_6/ptodata/2/pubpaa/US10D_PUBCOMB.pep.*
 - 17: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.*
 - 18: /cgn2_6/ptodata/2/pubpaa/US11_NEW_PUB.pep.*
 - 19: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep.*
 - 20: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	244	100.0	43	US-09-147-761-3	Sequence 3, Appl1
2	244	100.0	43	US-09-939-780-3	Sequence 3, Appl1
3	216	88.5	255	US-09-943-906-4	Sequence 4, Appl1
4	216	88.5	255	US-10-435-602-4	Sequence 4, Appl1
5	216	88.5	256	US-09-823-494-22	Sequence 22, Appl1
6	216	88.5	256	US-10-109-551-4	Sequence 4, Appl1
7	216	88.5	256	US-10-301-488A-28	Sequence 28, Appl1
8	216	88.5	256	US-10-105-616-5	Sequence 5, Appl1
9	216	88.5	256	US-10-410-907A-11	Sequence 11, Appl1
10	216	88.5	256	US-10-410-907A-12	Sequence 12, Appl1
11	216	88.5	256	US-10-346-190-81	Sequence 81, Appl1
12	216	88.5	256	US-10-346-190-88	Sequence 88, Appl1
13	216	88.5	256	US-10-301-448-28	Sequence 28, Appl1

14	216	88.5	256	16	US-10-479-218-1	Sequence 1, Appl1
15	216	88.5	256	16	US-10-479-218-6	Sequence 6, Appl1
16	216	88.5	256	16	US-10-479-218-7	Sequence 7, Appl1
17	216	88.5	256	16	US-10-479-218-8	Sequence 8, Appl1
18	216	88.5	256	16	US-10-479-218-9	Sequence 9, Appl1
19	216	88.5	256	16	US-10-479-218-10	Sequence 10, Appl1
20	216	88.5	256	16	US-10-479-218-11	Sequence 11, Appl1
21	216	88.5	256	16	US-10-479-218-12	Sequence 12, Appl1
22	216	88.5	256	16	US-10-479-218-13	Sequence 13, Appl1
23	216	88.5	256	16	US-10-479-218-14	Sequence 14, Appl1
24	216	88.5	256	16	US-10-479-218-15	Sequence 15, Appl1
25	216	88.5	256	16	US-10-479-218-16	Sequence 16, Appl1
26	216	88.5	256	16	US-10-479-218-17	Sequence 17, Appl1
27	216	88.5	256	16	US-10-479-218-18	Sequence 18, Appl1
28	216	88.5	256	16	US-10-479-218-19	Sequence 19, Appl1
29	216	88.5	256	16	US-10-479-218-20	Sequence 20, Appl1
30	213	87.3	256	13	US-10-109-551-6	Sequence 6, Appl1
31	213	87.3	256	13	US-10-109-551-8	Sequence 8, Appl1
32	213	87.3	256	13	US-10-109-551-10	Sequence 10, Appl1
33	213	87.3	256	15	US-10-346-190-82	Sequence 82, Appl1
34	213	87.3	256	15	US-10-346-190-83	Sequence 83, Appl1
35	211	86.5	256	14	US-10-301-488A-29	Sequence 29, Appl1
36	211	86.5	256	15	US-10-301-448-29	Sequence 29, Appl1
37	210	86.1	256	14	US-10-304-630-25	Sequence 25, Appl1
38	210	86.1	256	14	US-10-304-630-28	Sequence 28, Appl1
39	210	86.1	256	16	US-10-479-218-5	Sequence 5, Appl1
40	209	85.7	256	13	US-10-109-551-2	Sequence 2, Appl1
41	209	85.7	256	16	US-10-479-218-3	Sequence 3, Appl1
42	209	85.7	263	9	US-09-943-906-3	Sequence 3, Appl1
43	209	85.7	263	15	US-10-435-602-3	Sequence 3, Appl1
44	209	85.7	264	9	US-09-823-494-21	Sequence 21, Appl1
45	209	85.7	264	14	US-10-209-194-2	Sequence 2, Appl1

ALIGNMENTS

RESULT 1
US-09-147-761-3
Sequence 3, Application US/09147761
Patent No. US20010010918A1
GENERAL INFORMATION:
APPLICANT:
TITLE OF INVENTION: IMMUNOLOGICAL ASSAY FOR SPONGIFORM
NUMBER OF SEQUENCES: 4
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/147,761
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO IE/98/00007
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: CHRISTINA GATES
REFERENCE/DOCKET NUMBER: PL678pct
TELECOMMUNICATION INFORMATION:
TELEPHONE: 353-1-6605033
TELEFAX: 353-1-6606920
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 43
TYPE: amino acid
TOPOLOGY: unknown
MOLECULE TYPE: Amino acid
HYPOTHETICAL:
ANTI-SENSE:
ORIGINAL SOURCE:
ORGANISM:

CELL TYPE:
US-09-147-761-3

Query Match 100.0%; Score 244; DB 9; Length 43;
Best Local Similarity 100.0%; Pred. No. 1.7e-18;
Matches 43; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGGQGQGGSHSQWNKPSKPKPTNMKGVAGAAAGAVVGGIGGY 43
Db 1 GGGGQGQGGSHSQWNKPSKPKPTNMKGVAGAAAGAVVGGIGGY 43

RESULT 2

US-09-939-780-3
; Sequence 3, Application US/09939780
; Patent No. US20020168689A1
; GENERAL INFORMATION:
; APPLICANT: O'Connor, Michael
; TITLE OF INVENTION: Immunological Assay for Spongiform Encephalopathies
; FILE REFERENCE: 5000205
; CURRENT APPLICATION NUMBER: US/09/939,780
; PRIOR FILING DATE: 2001-08-28
; PRIOR APPLICATION NUMBER: 09/147,761
; PRIOR FILING DATE: 1999-03-03
; PRIOR APPLICATION NUMBER: PCT/IE98/00007
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 43
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: prion protein
; OTHER INFORMATION: specific synthetic peptide
US-09-939-780-3

Query Match 100.0%; Score 244; DB 9; Length 43;
Best Local Similarity 100.0%; Pred. No. 1.7e-18;
Matches 43; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGGGQGQGGSHSQWNKPSKPKPTNMKGVAGAAAGAVVGGIGGY 43
Db 1 GGGGQGQGGSHSQWNKPSKPKPTNMKGVAGAAAGAVVGGIGGY 43

RESULT 3

US-09-943-906-4
; Sequence 4, Application US/09943906
; Patent No. US20020150571A1
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; Williamson, R. Anthony
; Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/943,906
; FILING DATE: 30-Aug-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 255 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-943-906-4

Query Match 88.5%; Score 216; DB 9; Length 255;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGQGQGGSHSQWNKPSKPKPTNMKGVAG-AAAGAVVGGIGGY 43
Db 88 GGGGQGQGGSHSQWNKPSK-PKPTNMKGVAGAAAGAVVGGIGGY 130

RESULT 4

US-10-435-602-4
; Sequence 4, Application US/10435602
; Publication No. US20030228303A1
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; Williamson, R. Anthony
; Burton, Dennis R.
; TITLE OF INVENTION: Antibodies Specific for Native PrPSc
; FILE REFERENCE: UCA1059CON3
; CURRENT APPLICATION NUMBER: US/10/435,602
; PRIOR FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: 09/943,906
; PRIOR FILING DATE: 2001-08-30
; PRIOR APPLICATION NUMBER: 09/550,374
; PRIOR FILING DATE: 2000-04-13
; PRIOR APPLICATION NUMBER: 09/036,579
; PRIOR FILING DATE: 1998-03-06
; PRIOR APPLICATION NUMBER: 08/713,939
; PRIOR FILING DATE: 1996-09-13
; PRIOR APPLICATION NUMBER: 08/528,104
; PRIOR FILING DATE: 1995-09-14
; NUMBER OF SEQ ID NOS: 86
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 255
; TYPE: PRT
; ORGANISM: ovine
US-10-435-602-4

Query Match 88.5%; Score 216; DB 15; Length 255;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

QY 1 GGGGQGQGGSHSQWNKPSKPKPTNMKGVAG-AAAGAVVGGIGGY 43
Db 88 GGGGQGQGGSHSQWNKPSK-PKPTNMKGVAGAAAGAVVGGIGGY 130

RESULT 5

US-09-823-494-22
; Sequence 22, Application US/09823494
; Publication No. US20010041790A1
; GENERAL INFORMATION:

```
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Suelette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; TITLE OF INVENTION: Protein
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 22
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Ovis aries
US-09-823-494-22
```

```
Query Match      88.5%; Score 216; DB 9; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
```

```
QY      1 GGGGCGGSHSQWNKPSKPPTNMKVAG-AAAGAVVGLGGY 43
        |||
Db      89 GGGGCGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 131
```

```
RESULT 6
US-10-109-551-4
```

```
; Sequence 4, Application US/10109551
; Publication No. US20020194635A1
; GENERAL INFORMATION:
; APPLICANT: DUNNE, PATRICK W.
; APPLICANT: PIEDRAHITA, JORGE
; TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
; TITLE OF INVENTION: SPONGIFORM ENCEPHALOPATHIES
; FILE REFERENCE: TAMK:207US
; CURRENT APPLICATION NUMBER: US/10/109,551
; CURRENT FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: 60/280,549
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 4
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Ovis aries
US-10-109-551-4
```

```
Query Match      88.5%; Score 216; DB 13; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
```

```
QY      1 GGGGCGGSHSQWNKPSKPPTNMKVAG-AAAGAVVGLGGY 43
        |||
Db      89 GGGGCGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 131
```

```
RESULT 7
US-10-301-488A-28
```

```
; Sequence 28, Application US/10301488A
; Publication No. US2003016558A1
; GENERAL INFORMATION:
; APPLICANT: FRANGIONE, Blas
; APPLICANT: WISNIEWSKI, Thomas
; APPLICANT: SIGURDSSON, Einar
; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
; FILE REFERENCE: 5986/1K434US1
; CURRENT APPLICATION NUMBER: US/10/301,488A
```

```
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US 60/331,801
; PRIOR FILING DATE: 2001-11-21
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: Patentln version 3.1
; SEQ ID NO 28
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Sheep
US-10-301-488A-28
```

```
Query Match      88.5%; Score 216; DB 14; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
```

```
QY      1 GGGGCGGSHSQWNKPSKPPTNMKVAG-AAAGAVVGLGGY 43
        |||
Db      89 GGGGCGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 131
```

```
RESULT 8
US-10-105-616-5
```

```
; Sequence 5, Application US/10105616
; Publication No. US20030175967A1
; GENERAL INFORMATION:
; APPLICANT: Geron Corporation
; APPLICANT: Clark, A. J.
; APPLICANT: Cui, Wei
; APPLICANT: Zhao, Debbiao
; TITLE OF INVENTION: Vectors for Telomerizing Nuclear Donor Cells and Improving the E
; TITLE OF INVENTION: of Nuclear Transfer
; FILE REFERENCE: 732/002
; CURRENT APPLICATION NUMBER: US/10/105,616
; CURRENT FILING DATE: 2003-01-31
; PRIOR APPLICATION NUMBER: US Provisional Application 60/277,749
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patentln version 3.1
; SEQ ID NO 5
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Ovis sp.
US-10-105-616-5
```

```
Query Match      88.5%; Score 216; DB 14; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
```

```
QY      1 GGGGCGGSHSQWNKPSKPPTNMKVAG-AAAGAVVGLGGY 43
        |||
Db      89 GGGGCGGSHSQWNKPSK-PKTNMKHVAGAAAGAVVGLGGY 131
```

```
RESULT 9
US-10-410-907A-11
```

```
; Sequence 11, Application US/10410907A
; Publication No. US20030215880A1
; GENERAL INFORMATION:
; APPLICANT: Dennis R. Burton
; APPLICANT: R. Anthony Williamson
; APPLICANT: Gianluca Moroncini
; TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
; TITLE OF INVENTION: USES THEREOF
; FILE REFERENCE: 22908-1229
; CURRENT APPLICATION NUMBER: US/10/410,907A
; CURRENT FILING DATE: 2003-04-08
; PRIOR APPLICATION NUMBER: 60/371,610
; PRIOR FILING DATE: 2002-04-09
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 256
```

; TYPE: PRT
; ORGANISM: Ovis aries (Sheep)
US-10-410-907A-11

Query Match 88.5%; Score 216; DB 15; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGCGGSGSHSQWNKPSKPKPTNMKVAG-AAAGAVVGGLGGY 43
|||||
Db 89 GGGGCGGSGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGGLGGY 131

RESULT 10

US-10-410-907A-12
; Sequence 12, Application US/10410907A
; Publication No. US20030215880A1
; GENERAL INFORMATION:
; APPLICANT: Dennis R. Burton
; APPLICANT: R. Anthony Williamson
; APPLICANT: Gianluca Moroncini
; TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
; TITLE OF INVENTION: USES THEREOF
; FILE REFERENCE: 22908-1229
; CURRENT APPLICATION NUMBER: US/10/410,907A
; CURRENT FILING DATE: 2003-04-08
; PRIOR APPLICATION NUMBER: 60/371,610
; PRIOR FILING DATE: 2002-04-09
; NUMBER OF SEQ ID NOS: 36
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Ovis aries (Sheep)
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 171
; OTHER INFORMATION: R to Q
US-10-410-907A-12

Query Match 88.5%; Score 216; DB 15; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGCGGSGSHSQWNKPSKPKPTNMKVAG-AAAGAVVGGLGGY 43
|||||
Db 89 GGGGCGGSGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGGLGGY 131

RESULT 11

US-10-346-190-81
; Sequence 81, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; FILE REFERENCE: 5986/1K434US1
; CURRENT APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164

; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 81
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Sheep PRP
US-10-346-190-81

Query Match 88.5%; Score 216; DB 15; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGCGGSGSHSQWNKPSKPKPTNMKVAG-AAAGAVVGGLGGY 43
|||||
Db 89 GGGGCGGSGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGGLGGY 131

RESULT 12

US-10-346-190-88
; Sequence 88, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 88
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Goat PRP
US-10-346-190-88

Query Match 88.5%; Score 216; DB 15; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGCGGSGSHSQWNKPSKPKPTNMKVAG-AAAGAVVGGLGGY 43
|||||
Db 89 GGGGCGGSGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGGLGGY 131

RESULT 13

US-10-301-448-28
; Sequence 28, Application US/10301448
; Publication No. US20040095964A1
; GENERAL INFORMATION:
; APPLICANT: FRANGIONE, Bias
; APPLICANT: WISNIEMSKI, Thomas
; APPLICANT: SIGURDSSON, Einar
; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
; FILE REFERENCE: 5986/1K434US1
; CURRENT APPLICATION NUMBER: US/10/301,448
; CURRENT FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US 60/331,801
; PRIOR FILING DATE: 2001-11-21

; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 28
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Sheep
US-10-301-448-28

Query Match 88.5%; Score 216; DB 15; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
|||
Db 89 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGGY 131

RESULT 14

US-10-479-218-1
; Sequence 1, Application US/10479218
; Publication No. US20040171082A1
; GENERAL INFORMATION:
; APPLICANT: The Secretary of State for Environment, Food & Rural Affairs (DEFRA)
; APPLICANT: Jeffrey, Martin
; TITLE OF INVENTION: Diagnostic method
; FILE REFERENCE: CG/P/135/WOD
; CURRENT APPLICATION NUMBER: US/10/479,218
; CURRENT FILING DATE: 2003-12-01
; PRIOR APPLICATION NUMBER: GB 0113156.4
; PRIOR FILING DATE: 2001-05-31
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Ovis aries
US-10-479-218-1

Query Match 88.5%; Score 216; DB 16; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43
|||
Db 89 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGGY 131

RESULT 15

US-10-479-218-6
; Sequence 6, Application US/10479218
; Publication No. US20040171082A1
; GENERAL INFORMATION:
; APPLICANT: The Secretary of State for Environment, Food & Rural Affairs (DEFRA)
; APPLICANT: Jeffrey, Martin
; TITLE OF INVENTION: Diagnostic method
; FILE REFERENCE: CG/P/135/WOD
; CURRENT APPLICATION NUMBER: US/10/479,218
; CURRENT FILING DATE: 2003-12-01
; PRIOR APPLICATION NUMBER: GB 0113156.4
; PRIOR FILING DATE: 2001-05-31
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Ovis aries
US-10-479-218-6

Query Match 88.5%; Score 216; DB 16; Length 256;
Best Local Similarity 95.5%; Pred. No. 7.8e-15;
Matches 42; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

OY 1 GGGGWWGGGSHSQWNKPSKPKTNMKHVAG-AAAGAVVGLGGY 43

Db 89 GGGGWWGGGSHSQWNKPSK-PKTNMKHVAGAAAAGAVVGLGGY 131
|||

Search completed: March 4, 2005, 11:10:21
Job time : 134 secs

This Page Blank (uspto)